

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 2480.—VOL. LIII.

London, Saturday, March 3, 1883.

WITH
SUPPLEMENT. { PRICE SIXPENCE
BY POST, 21 4s PER ANNUM

MR. JAMES H. CROFTS, STOCK AND SHARE BROKER
AND MINING SHARE DEALER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING stocks and Shares
British and Foreign, Consols, Banks, Bonds (Foreign and Colonial), Railways,
Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas,
Water, and Dock Shares, and all Miscellaneous Shares.

BUSINESS negotiated in Stocks and Shares not having a general market
value.

Every Friday a general and reliable List issued (a copy of
which will be forwarded on application), containing closing
prices of the week. MINES INSPECTED.
BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTELL,
TELEPHONE NUMBER 1003.

SPECIAL DEALINGS in the following, or part:—

40 Almada, 16s. 150 Herodfoot, 7s.
20 Bedford Uni., £1 12 9 100 Indian Consol., 6s.
25 Bratsberg, 37s. 6 75 Indian Glenrock, 9s. 6
100 Carnarvon Cop., 3s. 6 100 Indian Phoenix, 9s. 6
50 Calao Bis. 25 Indian Trelvelyan, 6s.
50 Chile Gold, 17s. 50 Indian Trevelyan, 6s.
50 Colombian Hyd., 6s. 3 50 Kilifretch, 23s.
50 Consolidated, 6s. 100 La Plata, 21s.
50 California, 20s. 50 Langford, 8s. 6d.
75 Deva Cen., 4s. 6d. 100 Last Chance, 3s.
20 Devon Consol., 24s. 100 London, 2s. 6d.
50 Devon Moyer, 9s. 20 Leadhills, 2s. 6d.
20 Devon Friend., 5s. 3d. 100 Marke Valley, 18s.
100 Devon Friend., 5s. 3d. 100 Mono, 10s.
50 Don Pedro, 2s. 9d. 100 Mounts Bay, 19s.
50 Drakewells, 8s. 9d. 50 Myrose Gold, 8s. 9d.
50 East Blue Hills, 7s. 25 New Caradon, 6s. 3d.
25 Frontino, 22s. 3d. 50 Old Shepherds, 20s.
30 Goginan, 15s. 20 Organos, 42s.
50 Gold Coast, 24s. 10 10 15 p.c. Debs., 6s.
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25 Grogwinion, 12s. 50 Orta.
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Registration of New Companies.

The following joint-stock companies have been duly registered:—

THE HOLDECK MINING COMPANY (Limited).—Capital 60,000*l.*, in shares of 5*l*. To acquire, by purchase or otherwise, freehold and leasehold properties, lands, mines, pits, quarries, &c., for the purpose of carrying on the business of mining generally; raising, getting, and working, smelting, refining, selling, and otherwise disposing of ores, minerals and metals, and forging, casting, rolling, and shipping same. The subscribers (who take one share each) are—H. C. Bunkell, 106, Cheapside, surveyor; V. L. E. Miller, Temple, barrister-at-law; T. T. Miller, 85, Gracechurch-street, solicitor; H. B. Bunkell, Finsbury Park, estate agent; J. Noad, East Ham, engineer; R. F. Davies, Northfleet, manufacturer; G. Crabb, Kingsland, contractor. The first four subscribers shall constitute the board. Future directors will have to qualify in 20 shares.

THE NEUROGINE COMPANY (Limited).—Capital 6000*l.*, in shares of 1*l*. The manufacture and sale of a medicinal and non-intoxicating beverage. The subscribers are—W. Tibbles, Lyston, 2000; J. Gibson, Melton Mowbray, 300; S. Burton, Leicester, 10; E. L. Antrous, Birmingham, 10; J. Pearson, Lyston, 1; R. C. Pearson, Lyston, 1; G. Burden, Leicester, 5.

THE LEEDS RACE COURSE COMPANY (Limited).—Capital 60,000*l.*, in shares of 10*l*. To purchase a property at Osmondthorpe, and erect thereon and maintain a race course, &c. The subscribers (who take one share each) are—J. M. Verity, Leeds; S. Heaton, Leeds; J. Heaton, Leeds; J. Fawcett, Leeds; J. Severs, Leeds; B. Naylor, Leeds; J. Robinson, Scarborough.

THE EAST AFRICAN COMPANY (Limited).—Capital 1,000,000*l.*, in shares of 10*l*. To acquire certain concessions and carry on business in connection therewith. The subscribers (who take one share each) are—P. E. Lintilhac, Caterham Valley; J. C. P. d'Andrade, 94, Jermyn-street; M. F. da Silva, 3, Throgmorton Avenue; B. P. Pargana, 141, Victoria Park-road; J. Silva, 35, Cruched Friars; C. Ricci, 3, Throgmorton Avenue; S. Mendal, Balham.

THE MARAZION IMPROVEMENT COMPANY (Limited).—Capital 10,000*l.*, in shares of 1*l*. A local business of a land and building company in Cornwall. The subscribers (who take one share each) are—W. R. Crowe, 30, Budge-row; H. Williams, 30, Great St. Helen's; F. Dewing, 8, Delamere-street; G. H. Keene, Palmerston Buildings; W. Trew, 54, Hanover Gardens; W. Vincent, Poplar; C. Lockwood, Lower Norwood.

THE VACUUM PUMP AND ICE MACHINE COMPANY (Limited).—Capital 100,000*l.*, in shares of 10*l*. To manufacture machinery and apparatus for the production of ice in connection with certain patents. The subscribers (who take one share each) are—G. Smith, 15, Waterloo-place; E. Hart, 38, Wimpole-street; G. M. Alexander, Roehampton; J. B. Rottenstein, Paris; G. M. Smith, jun., 17, Green's Gate Gardens; J. Aitchison, 6, Pembroke-road; W. Howard, Lee.

THE MARINE SALVAGE AND HYDRAULIC SHIP-RAISING COMPANY (Limited).—Capital 200,000*l.*, in shares of 5*l*. The subscribers (who take one share each) are—T. Sissons, East Dulwich; C. Harvey, Drayton Park; J. F. Copeland, Penge; E. M. Pigram, Holloway; A. Ayiard, Manor Park; J. Andrew, Tollington Park; C. Barnett, Kingsland.

THE TOWNELEY MILLS COMPANY (Limited).—Capital 65,000*l.*, in shares of 100*l*. The business of cotton spinners and manufacturers, &c. The subscribers (who take 20 shares each) are—A. Mellor, Oldham; H. Heywood, Middleton; J. W. Lees, Oldham; C. T. Bardsley, Oldham; J. Hardman, Oldham; E. Schofield, Oldham; E. Potts, Oldham.

THE LIVERPOOL SOAP COMPANY (Limited).—Capital 50,000*l.*, in shares of 1*l*. To establish and work soap-works at Bootle, near Liverpool. The subscribers (who take one share each) are—R. Bonves, Liskard; D. Horn, Liverpool; J. Riley, St. Helen's; J. Griffith, Liverpool; J. McEachran, Liverpool; H. L. Riley, Liverpool; E. Burgess, St. Helen's.

THE EDISON ELECTRIC LIGHT COMPANY (Limited).—Capital 1,000,000*l.*, in shares of 10*l*. To acquire certain patents, and conduct in all branches an electrician's business. The subscribers (who take 500 shares each) are—E. P. Bouvier, 44, Wilton-crescent; Sir John Lubbock, High Elm; H. Gilliat, 4, Crosby-square; W. G. Rainham, 2, Fenchurch Avenue; W. Fowler, 38, Grosvenor-square; F. J. Bramwell, 37, Great George-street; E. H. Johnson, 57, Holborn Viaduct.

T. BISHTON (Limited).—Capital 20,000*l.*, in shares of 100*l*. To acquire and carry on a sheet-iron manufacturer's and galvaniser's business, established at Monmore Green, Wolverhampton. The subscribers are—T. Bishton, Wolverhampton, 25; W. Bishton, Wolverhampton, 1; W. F. Bishton, Wolverhampton, 20; J. Millington, Wolverhampton, 25; W. Bywater, Wolverhampton, 2; J. H. Lindsay, Liverpool, 5; F. D. Minshull, Wolverhampton, 1.

THE "LONDON" GAS ENGINE COMPANY (Limited).—Capital 75,000*l.*, in shares of 1*l*. The general business of iron and brass founders, machinists, and engineers in all branches. The subscribers (who take one share each) are—R. C. Martin, 2, Cloudesley-square; J. E. Clarke, 7, Upper Ashby-street; W. H. Johnson, Islington; E. C. Wakeling, 10, Mitchell-street; C. H. Burgess, 133, Doner-road; F. A. Wiedhoff, 42, Upper-street; J. W. Statz, 68, Charles-street.

FAULKNER'S (Limited).—Capital 60,000*l.*, in shares of 1*l*. To carry on and extend the business of hosiers, hairdressers, perfumers, &c. The subscribers (who take one share each) are—H. C. Taylor, 23, Philmore Gardens; W. Atlee, Windmire Hill; R. Delatorre, 39, Moorgate-street; G. Davison, Pimlico; W. Rowsell, Chichester-place; J. Murphy, Wood-lane; T. J. Fitzmaurice, 11, Coleman-street.

THE DECORATIVE CO-OPERATORS' ASSOCIATION (Limited).—Capital 10,000*l.*, in shares of 1*l*. The business of painters, decorators, and furniture manufacturers. The subscribers are—E. Majoribanks, 134, Piccadilly, 20; A. Grey, Howick, 20; A. H. D. Ackland, Oxford, 10; E. S. Talbot, Oxford, 10; E. A. Abbott, City of London School, 100; W. Minet, Temple, 10; A. C. Corbet, Monkhill Hall, 500.

THE YANG-TSZE INSURANCE ASSOCIATION (Limited).—Capital 200,000*l.*, in shares of 50*l*. A marine insurance business in all branches. The subscribers (who take one share each) are—F. D. Hitch, 5, Fenchurch-street; S. W. Pomeroy, 5, Fenchurch-street; R. Blackwell, 68, Cornhill; D. McLean, 31, Lombard-street; H. W. Wood, 2, Billiter Avenue; J. Buttery, 17, Trinity-square; F. B. Forbes, 58, Lancaster Gate.

THE ANGLO-AMERICAN CLAY PIGEON COMPANY (Limited).—Capital 30,000*l.*, in shares of 5*l*. To acquire, use, sell, or otherwise dispose of certain patents in connection with pigeon shooting, traps, &c. The subscribers are—G. A. C. Elliott, Edinburgh, 40; O. J. Crewe-Read, 2, Portugal-street, 20; R. Herbert, Clitheroe, 20; W. Pilcher, 49, Pall Mall, 1; J. G. Denie, 131, Grosvenor Park, 1; H. Curren, Vigo-street, 1; P. P. Wooldred, jun., Witton-street, 1.

THE WHARNCLIFFE WOOD MOOR COLLIERY COMPANY (Limited).—Capital 30,900*l.*, in shares of 10*l*. To acquire as a going concern the undertaking, business, property, and assets of a colliery situated at Carlton, near Barnsley, county of York, and to continue the business of a colliery owner and manufacturer of coke, fuel, and other products, bricks, tiles, pipes, &c. The subscribers (who take one share each) are—T. Coote, Oaklands, Esq.; J. J. Allport, Derby, Esq.; H. A. Allport, Nottingham, colliery owner; W. R. Percy, Barnsley, M.E.; E. D. Ward, Carlton, accountant; E. M. Needham, Belper, railway superintendent; R. Dalglish, Asfordby, C.E.

THE BOULINIKON FELT COMPANY (Limited).—Capital 10,000*l.*, in shares of 10*l*. To acquire and carry on a business of manufacturing paper, articles of paper, &c. The subscribers (who take one share each) are—A. Davidson, 80, Upper Thames-street; J. Davidson, Aberdeen; D. Davidson, Aberdeen; T. Griffith, Salford; J. Mackie, 154, Anerley-road; S. H. Dowsett, Wanstead; E. Guthrie, Manchester.

JAMESON'S PATENT COKING COMPANY (Limited).—Capital 100,000*l.*, in shares of 5*l*. The business of coke makers, oil refiners, chemical manufacturers, and merchants. The subscribers (who take one share each) are—W. W. Pattinson, Newcastle-on-Tyne; J. Jameson, Akenside; L. H. Armour, Gateshead-on-Tyne; J. T. Merz,

Newcastle-on-Tyne; R. Hoyle, Newcastle-on-Tyne; R. S. Watson, Newcastle-on-Tyne; N. C. Cookson, Newcastle-on-Tyne.

THE BIRMINGHAM AND DISTRICT BOILER INSURANCE COMPANY (Limited).—Capital 50,000*l.*, in shares of 10*l*. An ordinary insurance business, and the inspecting and reporting upon boilers, engines, &c. The subscribers (who take 100 shares each) are—A. Keen, Birmingham; B. Bingley, Dudley; R. Williams, Wednesbury; E. F. Smith, Dudley; J. Holcroft, Stourbridge; T. Holcroft, Bilston; C. Holcroft, Dudley.

THE DAYTON COAL AND IRON COMPANY (Limited).—Capital 250,000*l.*, in shares of 500*l*. To purchase or otherwise acquire a business established at Dayton, in Rhea county, State of Tennessee, United States of America, and certain interests in the lands, mines, railways, buildings, &c., belonging thereto, for the purpose of fully developing and working said business and interests. The subscribers (who take one share each) are—G. Salt, St. James's-square, esquire;

E. Salt, Balldar, manufacturer; T. Salt, Milner-field, manufacturer; C. Stead, Balldon, manufacturer; W. Stead, Saltaire, spinner; C. F. Stead, Balldon, spinner; J. H. Wade, Manningham, solicitor. The following constitute the first board:—Messrs. G. Salt, E. Salt, T. Salt, C. Stead, and W. Stead—the qualification being fixed at 10 shares.

SNOWDON MOUNTAIN COPPER MINES.—A supplemental statement has been issued by the promoters of the company to be formed to work these mines, directing attention to the experiments of Draper in connection with the transmission of power by electricity. It is found that one-half of the power applied can be utilised at the end of an iron wire of considerable length. When water-power is the applicable to generate the current this loss is immaterial. All the Snowdon ores treated by Mr. Readwin are found, it is said, to contain gold in paying quantities.

THE GARTH MERTHYR STEAM NAVIGATION COLLIERIES (LIMITED).

Issue of 350 First Mortgage Debenture Bonds of £100 each, bearing interest at 6 per cent. per annum.

100 per cent. in fully paid Shares given with each Debenture or £200 in Shares and Debentures for every £100 invested.

Messrs. BARNETTS, HOARES, and CO., Bankers, Lombard Street, London, and Messrs. WILKINS and CO., Brecon Old Bank, Cardiff, are authorised to receive subscriptions for the above 350 Bonds of £100 each, being the balance of 500, the remainder having been issued to the Vendor as part consideration for the purchase of the property.

THE GARTH MERTHYR STEAM NAVIGATION COLLIERIES (LIMITED).

No promotion money is paid by this company beyond the actual expenses, and the large amount which is usually paid to public promoters is included in the fully paid Shares given to the debenture holders, which alone are estimated to yield a dividend of 9 per cent. per annum.

Thus the investors obtain a First Mortgage Security for their investment bearing interest of 6 per cent. per annum as well as an equal amount in fully paid Shares in the undertaking, estimated to pay 9 per cent. per annum, together equal to 15 per cent. on the original investment.

The Garth Merthyr Steam Navigation Collieries (Limited).

TRUSTEES FOR THE DEBENTURE HOLDERS.
THOMAS SAUNDERS, Esq., J.P. | JOHN WALKER, Esq.

DIRECTORS.

General ADDISON, C.B., Melton, Suffolk.
THOS. SAUNDERS, Esq., J.P. (Director of the Lake Superior Copper Company, Limited).
T. B. FOX, Esq., J.P. (Messrs. Windgate and Co.), 14, Tithebarn Street, Liverpool.
J. P. HALL, Esq. (Messrs. A. Hall and Son, Westbury, Wilts).
J. WALKER, Esq. (Director of the Abbotsbury Railway Company).

OFFICES—15, FINSBURY CIRCUS, LONDON, E.C.

A BRIDGE PROSPECTUS.

The property upon which the debentures will be charged is the Garth Merthyr Steam Navigation Collieries, situated in the parish of Llangonyd, Glamorganshire, and connected by the Great Western Railway with the principal shipping ports of South Wales.

The property has been reported on by the well-known mining engineers, Mr. W. Adams, Cardiff, Mr. James Barrow, Maesteg, and Mr. R. Southern, Cardiff, copies of whose reports will be forwarded on application at the offices of the company. They estimate it to contain nearly 15,000,000 tons of coal, equal to an output of 750 tons per day for 50 years, and that upwards of £30,000 has already been expended.

It is important to notice that this property is not one upon which a large amount must be expended before returns are made, but is a going concern, and will yield an immediate output of coal, which, at a very moderate profit, will ensure the prompt payment of the debenture interest while the further development is proceeded with.

The prospectus is accompanied by a section of the coal measures underlying the property, the whole of which the company has the right to work, and which have all been proved.

The average cost of the coal, based on previous workings is 8s. per ton f.o.b. Cardiff. The present selling price is 9s. 6d. per ton, leaving a profit of 1s. 6d. per ton. This will yield an enormous dividend on the estimated output, but the directors have considered it sufficient to reckon on 1s. per ton, thus leaving 33 per cent. of the estimated profits not dealt with. This gives an annual profit of £7500 on coal to which must be added at the very least £1200 on coke—totalling £8700 per annum. The details of the calculations will be forwarded on application at the offices of the company.

These profits will enable the directors, after setting aside 6 per cent. interest on debentures, and 20 per cent. of balance to the redemption fund, to pay a dividend of 9 per cent. on share capital.

Thus the investor of every £100 will possess securities in debentures and shares for £200, the interest and dividend of which will, it is estimated, be equal to 15 per cent. on the original investment.

These collieries were acquired by the vendor with the intention of working them in conjunction with his own, but the undertaking is of too extensive a nature to be handled by him individually, hence the disposal of them to the present company.

Arrangements have been made with him to continue the management, as he is a gentleman of long and successful experience; this will be a great advantage to the company. He has taken more than half the purchase-money in debentures, and the possession of such a large interest in the property furnishes a guarantee of good and economical management.

Prospectuses and forms of application, together with plans and reports, and a surface sketch of the property will be forwarded on application to the offices of the company, where the original documents can be inspected.

N.B.—For the satisfaction of Scotch investors it was proposed that a disinterested engineer of eminence and well known in Scotland should be requested to inspect and report upon the property, and verify the statements in the prospectus. The vendor at once assented to this proposal, and Mr. J. H. Geddes (of the firm of Messrs. John and G. H. Geddes) was selected to visit and report on the colliery. The directors are glad to be able to state that this report is eminently satisfactory, and a copy of it can be seen at the offices of the company.

BULTHY MINE LEAD AND BARYTES WORKS COMPANY (LIMITED).

BANKERS—LLOYDS' BANKING COMPANY (Limited), Welshpool Branch.
FIFTEEN PER CENT. DIVIDEND.

See Prospectus, to be obtained of Bankers or Secretary, at the Offices,—
6, Westminster Chambers, S.W.

BIRMINGHAM & HARROWBARROW MINING COMPANY, LIMITED.

The following Circular was issued on the 27th February, 1883:—

14, Temple Street, Birmingham, Feb. 27th, 1883.

LADIES AND GENTLEMEN,

At the Board Meeting to-day the Managing Director handed in the following report, which speaks for itself:—

"Gentlemen.—When I last reported to you the progress which had been made in the disposal of this Company's capital, and upon which report you took action and placed the shares at a premium; I led you to take this step from what I now find to be an impractical conclusion.

"As you are aware, nearly all the creditors of the Wheal Fortune Company are willing to change their claims on that Company, into shares in our Company, and you were willing to accept such an arrangement, provided the Liquidators would take over the vouchers thus collected by us in lieu of, or in part payment of the £2200 which this Company is to pay in cash for the property.

"I have now to inform you that the Liquidators are prohibited by Law from entering upon any such arrangement, and they have advised your Secretary that they must have the whole of the actual cash placed in their hands, as they alone can distribute.

"This decision upsets therefore your arrangement to reserve the

unallotted shares for a premium, and will oblige you to open the subscription list for a special application at par for a time. I would advise, however, that in fairness to those who have applied for shares at a premium, that you allow this premium to be remitted, or placed to the credit of such shares in lieu of payment of second call."

The Directors thereupon resolved to carry out the suggestions of the Managing Director, and ordered that his letter be printed, together with a Notice to the effect that Subscriptions at par for the unallotted shares be invited, the allotments to be made as the applications come to hand, and that no application be considered, unless accompanied by a remittance of 2s. 6d. per share on the special form provided for that purpose.

In carrying out the decision of the Board I have therefore the pleasure of enclosing you our Prospectus and Special Form of Application, hoping that you will be able to secure a few of those shares which it is confidently expected will be in the Dividend-paying list before many months elapse.

I remain, Ladies and Gentlemen,

Yours obediently,

G. J. PARKINSON, Secretary.

The Remaining 14,500 Shares are offered for Subscription, and the LIST will be CLOSED on 15th MARCH NEXT ;
Deposit 2s. 6d., and Allotment 7s. 6d. per Share.

Under same management as Bratsberg, which has just paid a dividend from first year's operations. NEDENÆS is expected to do much better.

NEDENÆS COPPER COMPANY (LIMITED).

Incorporated under the Companies Acts, with Limited Liability.

CAPITAL, £60,000, IN 30,000 SHARES OF £2 EACH;

(Of which only 14,500 Shares remain to be offered).

Deposit 2s. 6d. per Share ; 7s. 6d. per Share payable on Allotment, and the remainder in three instalments of not exceeding 10s. each, at not less than three, six, and nine months from date of Allotment.

(If no Allotment is made, the Deposit will be returned in full).

DIRECTORS.

JONAS BERGTHEIL, Esq., 3, Circus Place, Finsbury.
H. W. LAMB, Esq., } Directors of the
JOHN McMILLAN, Esq.. } Bratsberg Copper Company,
J. H. MURCHISON, Esq., F.R.G.S. } Limited.
JOSEPH SALA, Esq., (Messrs. Sala and Co.), 108, Fenchurch Street, E.C.

* Will not act as a Director until after Allotment.

BANKERS.

IMPERIAL BANK, LIMITED, Lothbury.

SOLICITORS.

Messrs. HANCOCK, SHARP, and HALES, Dashwood House, New Broad Street.

SECRETARY AND OFFICES.

MR. J. H. A. SMITH, 8, AUSTIN FRIARS, LONDON, E.C.

The object of this company is to purchase several large and valuable freehold and other properties, with the extensive and productive copper mines, and the important plant and machinery thereon, as a going concern; all situated about 10 miles from Arendal, the principal shipping port of Norway.

The first operations were carried on in a most primitive manner, without any capital or machinery, but during that time they are said to have yielded about £30,000 of copper.

Since then, machinery for pumping, hauling, dressing, &c., has been erected, tramways laid down, shafts have been sunk, several levels driven, mostly for short distances, and about 4000 tons of ore and regulus sold (chiefly within a consecutive period of about 12 months) for the gross sum of £18,600, while it will be seen by Capt. Skewis's report, "the reserves in all the mines are considerable, as during the last two years the ground sunk and driven has been more in proportion than that stopped. It is estimated that there are about 3750 fms. of profitable ore ground opened."

It is important to notice that the lode improves considerably in depth, as in Brown's shaft it has increased in value from 4 tons of copper ore per fathom at 75 fathoms to 6 to 8 tons at 92 fathoms; and the 75, 60, and 50 fm. levels have been driven east about 80, 110, and 100 fathoms respectively, laying open ground varying in value from 2 to 5 tons per fathom; while the 60, west of Lamb's shaft, has been driven 60 fathoms in a run of profitable ground. No levels are yet driven below the 75, but they can be commenced at once at the 85 in a richer lode than in the levels above. At Sletne and Boilstad the lode is also best in the bottom, at the former being valued at 4 tons per fathom at only 12 fathoms deep.

The extent of this property on the course of the lodes is about two English miles, the Skymur and Boilstad Mines (both productive) being about 1050 fathoms apart; the Sletne shaft has lately been sunk between these mines, and the lode found to be rich. These are facts of the greatest importance in confirming the belief in the immense quantities of copper ore to be obtained by a vigorous working on a larger scale.

Capt. Daw, the manager of the famous Bratsberg Copper Mines, under date 4th September, 1882, writes about Nedenes :—

"At Skymur the two shafts are sunk 77 fathoms and 92 fathoms, but no level driven below 75. You can drive deeper levels at once in a richer lode than in levels above. There is a rich lode in the bottom of Sletne (750 fathoms to the east), though only 12 fathoms deep; and at Boilstad, 1050 fathoms east of Skymur, the lode opens well."

"Hitherto a large quantity of the ore would not pay for dressing and sending to England. The water washed away most of the copper, and left the iron. By your proposed plan of calcining all this ore will be available, and add materially to the returns. I estimate there are at surface at the different mines about 1500 to 2000 tons of ore ready to be treated, and by sinking more shafts on the lode, together with the use of boring machinery, I feel sure you will open still larger deposits of ore. I do not know where to find such a property again."

Capt. Skewis gives a list of the plant and machinery, and states that "the dressing machinery is arranged and erected with great judgment and skill, and capable of treating a large quantity of stuff," and that all is under cover, built of the best material, and fitted with heating and lighting appliances for working both day and night at all seasons of the year.

In order to open ore ground more rapidly and extensively, it is now intended to use boring machinery on a considerable scale, and to adopt a simple and inexpensive plan of roasting and calcining the ore and bringing them to a state of regulus of good percentage.

About 190 tons of the ore in a very rough state (without any dressing) were lately brought to England, and 70 tons were calcined at Messrs. Pontifex and Wood's works at Millwall, the result of which will be seen from the report of their manager (Mr. James Napier), dated 10th August, 1882, given herewith. Mr. Napier states that no ores could be better suited for blast-furnaces than those of these mines, and that if properly sorted and burnt ores of only 4 per cent. could be made to yield a regulus of from 20 to 25 per cent. of copper, with an expenditure of not more than 10s. per ton of ore treated. The remaining 120 tons of the above very rough undressed ore were sold, and yielded nearly 5 per cent. At present prices 20 per cent. regulus would be worth nearly £14 per ton.

A few weeks would suffice to erect the necessary furnaces, four of which, to treat 1000 to 1200 tons a month, would (according to Mr. Napier) cost only about £300. The erection of the boring machinery could be completed in a short time longer, and as soon as this is done Captain Skewis considers that 1200 tons of ore could be raised monthly, to be increased as more ground is opened; but for the first year (from the date of the above machinery being completed) to begin with, he estimates that the profit would be £12,000, which would be equal to 20 per cent. on the whole capital of the company. Mr. J. Daw, jun., who personally is well acquainted with these mines, writes from Norway under date Jan. 29, 1883—"If you can arrange for an early start we will show what stuff Nedenes is made of before the end of this year," and in a previous letter stated he would be "in a position to pay a good dividend the first year."

There has lately been expended upwards of £20,000 on machinery, railroad with locomotive, tramways, houses, sinking shafts, driving levels, &c., all of which are available for at once carrying on the works by the present company, and enable it without delay, and with the aid of boring machinery and calcining furnaces to be cheaply and quickly erected, to lay open almost immediately additional ore ground on a much larger scale than hitherto, and to return the produce in a far more efficient and remunerative manner.

The Bratsberg Mines (also in Norway, and under the same management as Nedenes will be) have just declared a dividend from the first 12 months' operations, without the additional machinery.

That copper companies carried on upon a large scale, and calcining or smelting their ores, are making immense profits, and commanding a high market value, the following figures will show :—

No. of Shares.	Name of Company.	Amount paid per Share.	Market Price.	Last Dividend per Share.
325,000 (and 24,532 debentures of £100 each)	Rio Tinto	10 0 0	22½	16s. half yearly
91,896	Tharsis (Cop. & Sul.)	10 0 0	35	£2½ half yearly
185,164	Mason and Barry	10 0 0	16	15s. half yearly
20,000	Cape Copper	8 0 0	55	£1 quarterly.
50,000 (& £35,000 debts)	Panulcillo	4 0 0	6½	6s. half yearly
50,000	Copiapo	3 10 0	4	8s. for year.

Seeing that the Nedenes Mines are situated within an easy distance of an excellent port, from which the copper can be shipped to England or any part of Europe, the transit being short and inexpensive; that there are no royalties to pay, and that the company will possess its own timber for mining and other purposes, there is every reason to anticipate that it will be quite as successful as any of the above undertakings of a similar character, while the capital is comparatively very much less than in the companies referred to.

The Mesel property is also large, and is about six miles from the above. There are extensive surface workings on a large lode, but no operations have been carried on in depth. This, like the Copper Mines property, is covered with a fine forest of timber.

The only contracts made are the following :—One, dated Jan. 9, 1883, between Thomas Young Strachan and Frederick Robertson Goddard, liquidators of the Arendal Mining and Smelting Company (Limited), of the one part, and John Henry Murchison of the other part; and another dated Feb. 1, 1883, between John Henry Murchison of the one part, and Frederick Augustus Goodall, as trustee for the Nedenes Copper Company (Limited), of the other part. These contracts can be seen at the offices of the solicitors of the company.

The vendor is one of the promoters and also one of the directors of the company, but will not act as a director until after a allotment. The company will thus have the valuable aid of his long experience and his knowledge of the properties now to be acquired.

Copies of the prospectus, with Captain Skewis's and Mr. Napier's reports, can be obtained at the offices of the company.

Meetings of Public Companies.

WEST POLBREEN MINE COMPANY.

An ordinary general meeting of shareholders was held at the offices, Walbrook, on Tuesday,

Mr. JOHN B. REYNOLDS in the chair.

Mr. FREDK. J. HARVEY (the secretary) read the notice calling the meeting. He (Mr. Harvey) also read the accounts for the past four months, showing a balance of cash at the bankers of 251*l.* 12*s.* 11*d.* with no liabilities due and unpaid, and the agent's report which was as follows:—

Feb. 26.—I beg to hand you the following report of this mine. Since the meeting held on Nov. 1 last, we have intersected a branch, or flat lode at the 4*f.m.* level. We have opened several fathoms on it, but so far as seen it is of no value. We still continue to push on the cross-cut, north of our eastern shaft, at the 40. We have intersected two lodes. There is another lode a few fathoms further north. I purpose to continue the cross-cut to intersect this lode also. I can then decide where to sink the engine-shaft to the best advantage for working all the lodes. Gentlemen, I beg to remind you these lodes have all been productive in the adjoining mine, where good profits have been made at and below the adit level. I beg also to say that the stratification at the points where we are working is all we can desire for the production of mineral, and no arguments are, therefore, needed to prove the promising nature and value of this speculation.—W. VIVIAN.

The CHAIRMAN said: Gentlemen, I am very glad indeed to be here to-day, but I have just left my bed, and feel very ill now, and not in a state equal to heavy business; therefore you will excuse me if I do not make many observations, or if the observations I do make are disjointed, or somewhat out of place. (Hear, hear). With

regard to the balance-sheet, you will observe that everything has been charged up, and that there remains a substantial balance in the hands of your bankers. The bank-book is on the table, and you can examine it with the receipts and balance-sheet, and you will find everything strictly in order. Then with regard to Capt. Vivian's report, it is as usual, gentlemen, very brief and much to the point. He tells you that the lode he has cut at the 40 *f.m.* level is of no value. You must not understand that to mean that it is altogether so poor as to be unworthy of notice. Not so; but it does not produce tin enough, at present, to make it profitable for working on. That is what Capt. Vivian means. Well, now, the same observation precisely was made of West Kitty just before we struck into the great riches we have there. I remember very well Capt. Vivian coming up to London and saying on one occasion, just before the shareholders' meeting—"Well, Mr. Reynolds, the lode is of no value; it is not worth anything." He simply meant by that he could not put a commercial value upon it. But he said that parts of the lode were very encouraging. There is mudiic there, and other indications which point to early improvement. Now as it was then, so it is with this lode at the present moment. It is what is called a promising lode—that is to say, it has parts which indicate that it is in the neighbourhood of a good quantity of mineral. It is right that you should have that explanation, for it is very important. Then you see he goes on to remind you that the lodes you have in this set have been very productive in the adjoining mine. Well, that is very encouraging because of what follows. The wind-up of this report is, to me, the most important of all, because there Capt. Vivian says that the stratification is all they can be wished for the production of mineral. Now you have, therefore, everything you can possibly desire. Considering your present position I do not think there is any doubt, at all events there is no doubt on my mind, that as this mine is developed it will become extremely valuable. (Cheers). I come to that conclusion on evidence which you know cannot be disputed, and on evidence which stands as high as any evidence I ever had in my hands in my life. I believe thoroughly in the future of West Polbreen. (Hear, hear.) Well, now, all that is very good so far as it goes, but in these times of agitation and enquiry you will want me to go further; you will want me to tell you about your title to this property, and whether it is likely when you have brought it into a dividend state you will be called upon by the lords either to surrender it or to pay some exorbitant premium for the renewal of the lease. Fortunately we have as lord of West Polbreen his Royal Highness the Prince of Wales, than whom we could not have a better landed proprietor, for I must say I know of no parties who deal so generously with tenants as the representatives of the Prince of Wales. (Hear, hear). In fact, I think sometimes that they go rather beyond their duty as representing his Royal Highness, for they, I believe, charge no dead rent, and they do not dictate to you in any way how you shall work the mine, and when your lease expires you have but to go to them, and get a renewal pretty well on any terms you think fair. I must say that too much praise cannot possibly be given to the officials of the Duchy office for the magnanimous way in which they deal with tenants, and this ought to be known throughout the whole mining community, especially at the present time, and persons would do very well to follow in the footsteps of the Prince of Wales in this matter. (Cheers). The other landed proprietors we have to do with are the Lords of Tywernhayle Tyas, who own the surface, and they follow in the wake of the Prince of Wales. So our title is really and truly, for all practical purposes, equivalent to a freehold, only we have to pay 1*l.* 1*s.* 6*d.* to the Prince of Wales. Well, you see exactly how you are. You have a very extensive mineral property in a district which I really do not believe now is second to any in England. (Hear, hear.) I do not believe it is, seeing what is taking place in a district not far away which sometime ago took precedence of St. Agnes. I must say I think now that St. Agnes is second to none in the country as a mining district, and for productiveness, and safety as far as title is concerned, for you must recollect that good as this title is, the titles of one or two adjacent mines are equal to it. (Cheers). Well, then, you have but to persevere in your present line of policy. You have but to spend as little money as you can, having regard to the proper development of the property, and in the process of time if you go on in this way you will find the confidence with which West Polbreen Mine is regarded at the present time by the outside public will be increased, and that the time will come when you will meet together, if you hold your shares, and receive your dividends. Now, of course, nobody will ask me when that will be, because you know perfectly well I could not tell you. We have the very best possible evidence that it is likely to be within a reasonable period, and unless, as you are not, a limited company and likely to be brought into financial difficulties the gain when it comes, will be, I am happy to say, a gain for the proprietors who are managing the mine, and I hope in the meantime they will not part with their shares. (Hear, hear.) I am obliged to you for listening to my statement. I am glad to say nothing. Nothing but a West Polbreen meeting would have drawn me from my bed to-day, but I do take a great interest in this little mine, and this little company. To-day it is a day of small things; we must not despise the day of small things, but we must work on diligently in the certain expectation that by-and-bye we shall have our ample reward. (Cheers). I have much pleasure in moving that the balance-sheet and accounts now presented be received and adopted.

Mr. EARLY seconded the motion, and expressed the hope that Mr. Reynolds would soon be restored to a full health. As regards the accounts, there was not a word to be said, because all the shareholders knew how excellently the accounts were kept in this office. (Hear, hear.) Everything was put before them, nothing was kept back. There were no insidious unpaid, and there was a substantial balance at the bank. Capt. Vivian's report need not, and did not disappoint any one. It was terse, complete, and to the point. The mine was being worked in a fair and proper way, but he had not heard any hint whether any call was intended?

The CHAIRMAN said: No call will be made to-day. We could not make one, we should not know how to spend it. (Laughs.)

Mr. EARLY said he rather took objection to the statement of the Chairman as to spending as little money as possible; for his own part he thought they should spend as much as possible consistent with the development of the mine. He thought the shareholders might congratulate themselves upon the position of the mine. (Cheers.)

The CHAIRMAN said: I said our duty was to expend as little money as possible, having due regard to the proper development of the mine; I would not on any account starve the mine. Whenever we find we can judiciously spend money upon the mine we will do so with great confidence and pleasure. We feel our way as we go. Then you must recollect that nearly all the money which is spent does go to the development of the property. The salaries are exceedingly light, and we have at present no legal charges of any kind; so what we spend really goes in the work of excavating, which is a very important point, and that is not the case in all companies, I need not tell you.

Capt. VIVIAN: I should be very sorry if any gentlemen present should feel disappointed that we have not to make a call, and that we have not spent money enough. I should be sorry for you to go away with that impression. The general complaint in Cornwall has been that the agents there get through the money too quickly. (Hear, hear.) That is not so with us. The salaries are very small indeed. My way of working a mine is not to see how much money I can get through, but to see where the money can be most profitably spent. Now, there are three or four lodes in this mine, and we might come to a hasty conclusion, and put up an engine, and spend 40*000.* or 50*000.* or even, as has been the case in Cornwall and other places, 10*000.* and then find we have spent the money in the wrong place. That is some times the case. I should not like it to occur in West Polbreen. I want to open up the lodes, and so place the engine and engine-shaft as to command the different points. You all know the slow process of mining. We are extending the levels north and south. You all know the lodes run east and west, and we cross-cut north and south to open up the different lodes. We cannot keep more than one pair of men at one place, which is the reason we are expending the money slowly. When we have cross-cut the engine and go to work, and not throw our money away in a hurry. (Cheers.) That is just the object of going on in this slow way, and I think "slow and sure" is better than being in a hurry and losing our money to no purpose. (Hear, hear.)

A SHAREHOLDER asked whether this lode was the West Kitty lode?—Capt. VIVIAN: No; it is not. We struck this flat lode three or four months since. I thought at first it might be the West Kitty lode, but it is not. The West Kitty lode has not been found as yet, but, of course, we are hoping to come across it some day—it may not be far distant. The West Kitty lode must certainly be in this mine, but we have not come across it yet.

A SHAREHOLDER asked the width of the West Kitty lode?—Capt. VIVIAN said sometimes 1 ft. and sometimes 10 ft. Mining was a speculation; to-day they might stand at nothing, and next week it might stand at thousands where it was pounds to-day.

Mr. H. J. HARVEY: You consider this in West Polbreen good?—Capt. VIVIAN: The indications are very good, and the strata-lodging also. As we pursue the cross-cut north and south the location is better, and the country rock is highly mineralized.

A SHAREHOLDER: Is it the Doreas lode you have got?—Capt. VIVIAN: We

have got it, but it is of no value. It was of value in the Old Polbreen, and gave there a profit of 40,000*l.* from the level we are now working at down to the 60 on the Doreas and Tregay's lodes. We have the West Kitty lode to cut, and when we have cut it we can decide where to go to work and spend our money. Until that is cut we cannot decide where to put the engine.

Capt. VIVIAN: No; I cannot say with certainty. It is a good way west of where West Kitty lode has been seen. We are driving a cross-cut at New Kitty, adjoining West Polbreen, and we expect to cut it there, when we have cut it at New Kitty we can say better where we shall get the lode in West Polbreen. We are hoping to cut the West Kitty lode at the New Kitty engine-shaft.

The resolution for the adoption of the report and accounts was then put and carried unanimously.

A SHAREHOLDER proposed that a vote of thanks be presented to the finance and audit committees for their past services, and that they be re-elected.

Mr. DORE seconded the motion, which was put and carried unanimously.

The CHAIRMAN: I am very much obliged to you for your attendance to-day. It reminds me very much of the many West Kitty meetings we had in the old times when we were going on there just as you are, quite as pleasantly as when dividends are declared. I am not sure they were not more pleasant, as we are able to indulge so beautifully in the pleasures of hope. (Laughs.) There is something very delightful in that; but at the same time I shall be glad to hear the pleasures of hope for the pleasures of reality, and I am sure you will be also. (Cheers.)

A cordial vote of thanks to the Chairman closed the proceedings.

LEADHILLS SILVER-LEAD MINING AND SMELTING COMPANY.

The ordinary general meeting of shareholders was held at the offices, Finsbury-circus, on Thursday.

Mr. PETER WATSON (Chairman of the company) presiding.

Mr. F. R. WILSON (secretary) read the notice convening the meeting, and the reports of the directors and of Mr. Arthur Waters.

The directors have pleasure in drawing attention to the largely augmented return of ore from the mines, and to the increased duty of the smelting works. In the 27 weeks ending Dec. 31 the ore dressed was 1546 tons 3 cwt.; of this 100 tons were sold in the ore, 1217 tons 11 cwt. were smelted, and the remaining 225 tons 12 cwt. added to our stock, increasing it to 501 tons 3 cwt. The pig-lead made in the same period was 17,042 bars, equal to about 852 tons 2 cwt. of which 1894 bars were paid as lordship, 13,600 bars sold, and 4543 added to the stock, increasing it to about 700 tons. In the first half of the financial year 1882-3 (about 27 weeks) the ore dressed was 918 tons 14 cwt., 987 tons 17 cwt. were smelted, 273 tons sold, and 12,982 bars (equal to 648 tons 4 cwt.) of pig-lead made. Thus it will be seen that the returns of ore have averaged 10 tons a month more—248 against 142 tons.

These results they deem extremely satisfactory, but, on the other hand, they have to record a failing and limited market for the produce, which has not only seriously curtailed the profits that we might reasonably have expected, but has also caused stocks to accumulate to such an extent as to necessitate the postponement of a division of the profits. The estimated profit for the half-year (valuing the stock at 13*s.* per ton of pig-lead) would, they consider, justify an interim dividend of 4*s.*; but this is subject to realization. This exceptionally low price of lead must, before long, so seriously affect the producers as to cause a reaction, and they have the great satisfaction of knowing that their financial position is so sound, and that though the underground workings are very extensive, the pumping and hauling being almost exclusively done by water-power, their costs are comparatively light.

The report submitted by the consulting engineer describes the mining operations, and the objects of the more important and interesting points of development. Wilson's shaft at Brown's Mine has been sunk to the 70, and preparations are being made for sinking deeper from the dip of the run of ore between the 41 and 70. They expect this sinking to begin in about 8 or 9 fms. below the latter level, after which the main run will be to the south. At surface additional and improved slime dressing machinery is being erected. The tram-road from Wilson's shaft to Ried's dressing-house has been completed. Another ore heap has been started at our smelting works, and various other improvements have been carried out, and they may add that the works generally have been carried out to their entire satisfaction.

The CHAIRMAN said: Gentlemen, the directors have very much pleasure in meeting you here to-day, because at no period in the company's history has Leadhills looked so favourable as at the present time. It is a fact so far as this company is concerned—I think I may say, Mr. Waters, according to your own report and according to your own feelings, and so far as the opinion of Mr. Newbigging is concerned—since the formation of the company the mine itself has never looked so well; but, of course, all mines are a speculation. There is no doubt about that. A man who goes into a mine, whether it be here at home or abroad, must consider that he is doing so as a speculation, and not as an investment. We meet here to-day with a very great deal of pleasure, for I can say this safely that there is no purely lead mining undertaking in this country that stands either financially or in regard to the present appearances underground, or in its prospects, equal to Leadhills. (Hear, hear.) I am not saying this simply to land up Leadhills above any other property; but I speak of what I know as a positive fact, and I would venture to say to any shareholder in Leadhills, if he is of a contrary opinion to that to which I have expressed, he has the opportunity either now or hereafter of going and viewing the property himself. He can go and see it as well as I can. You can see the lead there just as plainly as you can see a rick of hay or a rick of straw. It is perceptible to the eye. If you take a candle underground Mr. Waters will show you by candle-light—for you cannot avail yourselves of the daylight down there—the reservoirs we have laid open in our mine. (Hear, hear.) But there is another thing which you can see by daylight, that is our stock of lead at Abington Station; you shall see our works, and the operations of the fumes, and you shall see the lead ore that is being brought up and stacked, and whether it be by candlelight or by daylight the shareholders one and all will be able to see for themselves whether or not the statements I have made are facts or not. I lay down the challenge for any shareholder to go and see the property for himself. As you are aware, this is the half-year meeting, not the annual meeting at which we submit accounts to you; but so far as we are able to give an account of our stewardship for the half-year that has passed I think it is exceedingly satisfactory—(Hear, hear)—and not only so, but I think Mr. Waters' report on the mine is also not satisfactory. I visited the mines three weeks ago in company with the secretary, although the weather was very severe indeed, and we were quite confined as to the various operations that have been carried on during the last five or six years. You will remember that at the last meeting I told you that as the price of lead was so low we did not take out the ore to the full extent that we could have done. At the same time we did this. The lower lead got the greater operations in opening out the mine became necessary, and we have continued to sink shafts and open out the mines most vigorously. We have gone on with our smelting works, putting up new flues, and doing a very large amount of extra work, the expenditure of which has amounted altogether to a good way on to 10,000*l.* during these six years. Most of that has come out of revenue, and that is equal to about 12*s.* a share. That has all gone for the future benefit of this undertaking, and, I hope, to the outside public will be increased, and that the time will come when you will meet together, if you hold your shares, and receive your dividends. Now, of course, nobody will ask me when that will be, because you know perfectly well I could not tell you. We have the very best possible evidence that it is likely to be within a reasonable period, and unless, as you are not, a limited company and likely to be brought into financial difficulties the gain when it comes, will be, I am happy to say, a gain for the proprietors who are managing the mine, and I hope in the meantime they will not part with their shares. (Hear, hear.) I am obliged to you for listening to my statement. I am glad to say nothing.

The CHAIRMAN said: Gentlemen, the directors have very much pleasure in meeting you here to-day, because at no period in the company's history has Leadhills looked so favourable as at the present time. It is a fact so far as this company is concerned—I think I may say, Mr. Waters, according to your own report and according to your own feelings, and so far as the opinion of Mr. Newbigging is concerned—since the formation of the company the mine itself has never looked so well; but, of course, all mines are a speculation. There is no doubt about that. A man who goes into a mine, whether it be here at home or abroad, must consider that he is doing so as a speculation, and not as an investment. We meet here to-day with a very great deal of pleasure, for I can say this safely that there is no purely lead mining undertaking in this country that stands either financially or in regard to the present appearances underground, or in its prospects, equal to Leadhills. (Hear, hear.) I am not saying this simply to land up Leadhills above any other property; but I speak of what I know as a positive fact, and I would venture to say to any shareholder in Leadhills, if he is of a contrary opinion to that to which I have expressed, he has the opportunity either now or hereafter of going and viewing the property himself. He can go and see it as well as I can. You can see the lead there just as plainly as you can see a rick. It is perceptible to the eye. If you take a candle underground Mr. Waters will show you by candle-light—for you cannot avail yourselves of the daylight down there—the reservoirs we have laid open in our mine. (Hear, hear.) But there is another thing which you can see by daylight, that is our stock of lead at Abington Station; you shall see our works, and the operations of the fumes, and you shall see the lead ore that is being brought up and stacked, and whether it be by candlelight or by daylight the shareholders one and all will be able to see for themselves whether or not the statements I have made are facts or not. I lay down the challenge for any shareholder to go and see the property for himself. As you are aware, this is the half-year meeting, not the annual meeting at which we submit accounts to you; but so far as we are able to give an account of our stewardship for the half-year that has passed I think it is exceedingly satisfactory—(Hear, hear)—and not only so, but I think Mr. Waters' report on the mine is also not satisfactory. I visited the mines three weeks ago in company with the secretary, although the weather was very severe indeed, and we were quite confined as to the various operations that have been carried on during the last five or six years. You will remember that at the last meeting I told you that as the price of lead was so low we did not take out the ore to the full extent that we could have done. At the same time we did this. The lower lead got the greater operations in opening out the mine became necessary, and we have continued to sink shafts and open out the mines most vigorously. We have gone on with our smelting works, putting up new flues, and doing a very large amount of extra work, the expenditure of which has amounted altogether to a good way on to 10,000*l.* during these six years. Most of that has come out of revenue, and that is equal to about 12*s.* a share. That has all gone for the future benefit of this undertaking, and, I hope, to the outside public will be increased, and that the time will come when you will meet together, if you hold your shares, and receive your dividends. Now, of course, nobody will ask me when that will be, because you know perfectly well I could not tell you. We have the very best possible evidence that it is likely to be within a reasonable period, and unless, as you are not, a limited company and likely to be brought into financial difficulties the gain when it comes, will be, I am happy to say, a gain for the proprietors who are managing the mine, and I hope in the meantime they will not part with their shares. (Hear, hear.) I am obliged to you for listening to my statement. I am glad to say nothing.

The CHAIRMAN said: Beyond that it is the old tale which we have had to tell for the last three or four years—that is, the great depression in the price of lead, which still continues. We cannot help this. If you ask me which is the greatest speculation, Leadhills' Mines or the lead trade, I should almost tell you that the lead trade is the greatest speculation of the two. We used to get something like 17*s.* a ton for our ore, and if we sold the lead in the ore we should now get about 9*s.* a ton. Now, a difference of 8*s.* a ton on (say) 200 or 250 tons of lead ore a month is a very serious item; or if you put it in pig, and you get instead of 22*s.* 10*d.* when we have had to pay 1*s.* 6*d.* a ton—there is a difference of 9*s.* 10*d.* a ton, which is, as I say, a very serious item. Now, is there any shareholder who can help that? The directors cannot help it. Of course we have seen the reflections that have been passed on the directors that they have been doing this, and that the other goes in the work of excavating, which is a very important point, and that is not the case in all companies, I need not tell you.

Capt. VIVIAN: I should be very sorry if any gentlemen present should feel disappointed that we have not to make a call, and that we have not spent money enough. I should be sorry for you to go away with that impression. The general complaint in Cornwall has been that the agents there get through the money too quickly. (Hear, hear.) That is not so with us. The salaries are very small indeed. My way of working a mine is not to see how much money I can get through, but to see where the money can be most profitably spent. Now, there are three or four lodes in this mine, and we might come to a hasty conclusion, and put up an engine, and spend 40*000.* or 50*000.* or even, as has been the case in Cornwall and other places, 10*000.* and then find we have spent the money in the wrong place. That is some times the case. I should not like it to occur in West Polbreen. I want to open up the lodes, and so place the engine and engine-shaft as to command the different points. You all know the slow process of mining. We are extending the levels north and south. You all know the lodes run east and west, and we cross-cut north and south to open up the different lodes. We cannot keep more than one pair of men at one place, which is the reason we are

On the motion of Mr. W. S. Lampert, seconded by Mr. TREBLE, the auditor Mr. C. Fitch Kemp, was reappointed.

On the motion of Mr. SHEARWOOD, seconded by Mr. S. LAMPERT, a cordial vote of thanks was passed to the Chairman and directors.

The CHAIRMAN acknowledged the compliment, and expressed the hope that on the next occasion they would meet under still more favourable circumstances.

The meeting then broke up.

SOUTH WALES COLLIER COMPANY.

The ordinary general meeting of shareholders was held at the City Terminus Hotel on Friday, Feb. 23.

Mr. RICHARD POTTER in the chair.

Mr. WM. EDGAR WILLIAMS (the secretary), read the notice convening the meeting. The report and statement of accounts were taken as read.

The CHAIRMAN said there was no material fact connected with the working of the colliery during the past year which had been omitted from the report. With regard to the current half-year the month of January was decidedly a good one, and so far as could be seen the prospects of the trade were good, and there was every prospect that it would be the best half-year they had had for some years. There was every indication that they had turned the corner, and up to the present time they had certainly done better than in the corresponding period of last year. Having invited discussion the Chairman moved the adoption of the report and accounts.

Lieut.-Col. HENRY WORTH (the managing director), in seconding the motion, said the report would have been a good deal more flourishing but for the fact that in the past half-year a good deal of what had hitherto been charged to capital had been charged to revenue. Every expenditure for development work and for improvements was now charged to revenue; the only addition to capital expenditure being the amount incurred in the building of two cottages. About £2,000 had been spent on that head in the half-year, and the total cost of the cottages would probably be about £1000, or 1200 each. The extra expenditure paid out of revenue in the first half of the past year amounted to £800; the principal item being the additions and new sidings at Owmillery. In the second half-year the extra expenditure was £712, whence other matters raised the amount to nearly £2000. There would, of course, always be charges of this kind, but he hoped they would not be so large in future. The colliery was now in a far better condition than it had ever been in up to the present time, and they were now getting into a form in which he did not think they would require so large an expenditure for improvements. The output had been large, and but for the extra expenses, to which he had referred, the profits would have been much larger. The costs of raising the coal had increased in the half-year by about 3d. per ton, owing chiefly to a rise of 5 per cent. given to the men; but even with this increase the costs had been considerably reduced during the time that the present management had been in office.

Mr. FRANKS was glad to see that the preference shareholders were at length going to receive a dividend, and he hoped that, if profits were earned sufficient to pay a dividend, the directors would pay it in September, and not wait for a year to come.

The CHAIRMAN said the directors would only be too happy to pay a dividend in September if they could do so consistently with the interests of the company. The dividend now proposed was for about 14 months. In reply to further questions, the Chairman said the additional expenditure referred to in the report would be paid out of revenue. The coal bought was generally obtained for the purpose of the rapid coaling of ships, and always yielded the company a profit.

Col. HENRY WORTH, in reply to a question, said he hoped that in the current half-year the output would be increased to 800 tons a week. The report and accounts were then unanimously adopted.

The CHAIRMAN then moved—"That a preference dividend of 10 per cent. on the B and new B shares be paid up to June 30, 1883, payable on March 7."

Mr. FIRBANK, in seconding the motion, thought it must be very gratifying to the shareholders to see that dividends were about to be resumed. He thought they had now turned the corner, and that they would now do fairly well. Considering what they had had to do in the past half-year, he thought the company had been very fairly successful. The motion was carried.

On the motion of Mr. F. G. SMITH, seconded by Mr. HOLLOBONE, the retiring directors were re-elected, and on the motion of Mr. COLBOURNE, the usual remuneration to the board was voted.

The CHAIRMAN, in reply to a question, said he did not at present see any probability that more capital would be required, as, after paying the dividend now declared they would have a balance in hand of about £7000.

The meeting then closed with a vote of thanks to the Chairman and directors.

MID-DEVON COPPER MINING COMPANY.

The ordinary general meeting of shareholders was held at the offices, Finsbury Pavement, on Monday,

Mr. THOMAS NICOLLS ROBERTS in the chair.

Mr. W. H. RICHARDS (the managing director) read the notice convening the meeting. The report and statement of accounts were taken as read.

The CHAIRMAN said: Ladies and gentlemen—Before moving the adoption of the report and balance-sheet I wish to offer a few observations. I may remark that the very adverse nature of the weather since September has prevented us from making such satisfactory progress as would have been possible had the season been as favourable as it was in the previous year. We have, nevertheless, accomplished more practical work during our nine months' tenure of office, to the end of 1882, than any previous eighteen months in the history of this mine can show. We have raised ore from the 45 fm. level, we have

thoroughly repaired the timbering of the inclined shaft, the dragee being only suspended until we can get the rock-drills to work, which will be in a very few days now. We have made preparations for driving the 62 fm. level, which will be pushed forward as soon as the men have become accustomed to the rock-drills. We have erected a water-wheel, and laid down machinery for driving the drills, which, if the weather had not been so persistently unfavourable, would have been in operation two months ago, but the masons could only work one and a half or two days per week for several weeks in consequence of the heavy and continuous rains. We have raised and sold ore yielding in round figures £700, more than the actual cost of producing it, and this notwithstanding the hindrance during the first three months of our operations by the repairs rendered necessary by the collapse of the inclined shaft. It was for great regret to us that the productiveness of the 45 fm. level in September and October last was suddenly arrested by a cross-course, and the yield has fallen off so considerably that at present we have resolved to keep only three men and a boy working at that level. And now a few words with reference to the issue of preference capital authorised by the shareholders in October last. Although we view with regret the small measure of support given by the shareholders to that issue, we cannot, considering the past history of the mine, affect to be surprised at it, for that are the facts: They are these—that during the nine years' existence of the Bostock Mining Company (I quote from the printed reports) £135,000 were absorbed by the rent of offices in London, by the salaries at that office, and by travelling and hotel expenses. During the three and three-quarters years' existence of the Mid-Devon Company, up to March 25 last, 1883, were absorbed in a similar way, added to which there was £52,000, in connection with the location of a resident engineer at the mine, whose presence there was of no value, so that the money was wasted. These sums make a total of £1835, which exceeds the value of all the ore raised and sold from the commencement of this company to Dec. 31, 1882, by 300%. I say then that we are not surprised at the backwardness of shareholders in subscribing this capital, more especially as to some of them who bought their shares in the Bostock Company at a premium, and eleven-twelfths of whose property was swept away by the liquidation, and the facts given above may have afforded some justification for shareholders in not coming forward to help us. But now the whole thing is changed. Our London expenses for the nine months, excluding office furniture and fittings, have been at the rate of less than 500,000, and for the year 1883 I may venture to say, thanks to the self-denying and generous conduct of our excellent managing director, they will not exceed 600,000. The item of travelling expenses also will be kept down, and we can point to those in this balance-sheet in proof of it. They represent their visits by two directors each visit, and one visit by one director, or, to put it in another way, they are equivalent to seven visits by one director, occupying, including the days of going and returning, 27 days. On the same line in the balance-sheet you will find that £10,000 was paid for one visit by your late Chairman. There must be travelling expenses, because if the directors do their duty they must visit the mine occasionally, but I have gone into those details to show you that the money is being carefully used, and, therefore, we feel that we deserve your support in our efforts to develop our property. And what is it we ask for? Not quite 3000.

At our half-yearly meeting, in August last, I promised to take up my proportion of shares, although I stated not all at once. Practically I have taken up more than my share, as up to the end of 1882 I had taken up and paid in full 1500 shares, and have since paid up and paid in full 350 shares, so that I have only about 500 more to take up to complete my proportion. The residue, or nearly 3000 shares, if divided by the number of shareholders who have not yet subscribed, would not require an average of 150, each from them, and I think, considering the rigid economy that is being, and will be practised, we are justified in expecting the shareholders to come forward and take up these shares, so that we may proceed vigorously with the remainder of the recommendations in Capt. Skewes' report, which we shall certainly do if the money is forthcoming. I would also ask the debenture-holders to give us some support. They have received (I speak of original holders) six-tenths of their principal back again, or a sum equivalent to 6 per cent. for ten years, yet, with the exception of myself and three of my friends who are debenture holders, not one holder has taken a single share. I may here observe that there is a mine (the Emily Mine) about one mile to the south-east of our mine, the lodes in which run parallel with ours, and within the last four months there has been an important discovery of at their 97 fm. level which, allowing for difference of elevation, would be about 107 fm. deep in our mine. They have raised during that period about 100 tons of fine quality ore, chiefly from this 97 fm. level, and their mine is looking better than ever for continued productiveness. Now what we ask for the remainder of the capital to be subscribed is that we may put down the new pumping wheel recommended by Capt. Skewes, so that we may proceed with the further sinking of the mine as quickly as possible, and get down to the same level as that in which the above important discovery has been made. Such a discovery in our larger lode would mean dividends for the shareholders very soon after such discovery had been made, indeed if we raised no greater amount of ore than has been raised during the last four months at the neighbouring mine we should be able to pay a dividend to the preference shareholders. We appeal then to the shareholders and debenture holders, to the former because we are endeavouring to improve their property into a good and marketable condition, and to the latter because we are exerting ourselves to keep faith with them, and make their security still more valuable to take up these not quite 3000 shares, so as to enable us to carry out, with the least possible delay, the whole of the work mentioned in Capt. Skewes' report. If you will supply us with the money we will once prepare to put down the additional pumping-wheel, but if the money

is not found in time for that to be done in the summer we shall not be warned by the experience of this winter, attempt to carry out such a work in the fall of the year. In conclusion, I would say you have an excellent agent at the mine who understands his business, and works very hard to promote your interests and his own (for he is a preference as well as an original shareholder), and he will be glad to show and explain everything connected with the mine to any one presenting an order from the managing director, who will be happy to furnish an order to any one who feels inclined to see and judge for himself. With these observations, and subject to any questions which may be asked, I move the adoption of the report and balance-sheet. —Mr. JOHN GOULD seconded the motion.

Mr. JAMES WILSON quite agreed with all that the Chairman had said as to the mine and as to the method of working it which had now been adopted. He had advised that method years ago, but his advice was not acted upon. By working the upper levels they had proved the truth of what he had stated, and he believed that if they went on in the same direction that good results would follow. He was exceedingly glad as, next to the Chairman, the largest shareholder in the mine, that his advice had at length been adopted. With regard to the Chairman's remark as to travelling and other expenses they were very low, and he congratulated the shareholders upon it; but with regard to the statement that he (Mr. Wilson) had charged 10/- for one visit, it should be stated that his visit extended over a week or ten days—they being busy with the erection of machinery at the time. He had served the mine religiously for 15 years, and had never taken a penny out of it to his own benefit. Mr. Wilson went on to complain of the delay in erecting the rock-boring machinery, and said the directors had been nine months about the matter, but it was not yet completed. He believed, however, that the directors were doing the best they could for the shareholders, and he was confident that they only wanted capital to make the company a success.

The CHAIRMAN pointed out that it was only six months ago that the question of rock drills was talked over first. The contract for them was signed five months ago; but in consequence of the heavy and continuous rains the masons could frequently only work a day and a half or two days a week. Had the weather been fine the cost of erecting this machinery would, Mr. Loam stated, have been a third less than it had been.

The report and accounts were then unanimously adopted.

The CHAIRMAN moved the re-election of Mr. John Gould as a director. —Capt. MAY seconded the motion, which was carried.

The CHAIRMAN then moved the re-election of Mr. William Hall as a director. —This was seconded by Mr. A. P. MAY, and carried.

On the motion of Capt. MAY, seconded by Mr. STEWART GOULD, Mr. Evans was appointed auditor.

The meeting then closed with a vote of thanks to the Chairman.

PARYS COPPER CORPORATION.

An extraordinary general meeting of members of this company was held at the offices, Finsbury-circus, yesterday (Mr. J. Y. WATSON in the chair) for the purpose of enabling the shareholders to decide whether they would strengthen the hands of the directors by the subscription of additional funds, or whether they would allow the company to go into liquidation.

Mr. FELIX F. WILSON (the secretary) read the notice calling the meeting.

The CHAIRMAN said that the directors had received applications sent in for 2426 shares. Mr. Macmillan had sent in application for 50 shares, and as Mr. Macmillan was a barrister, and might be of considerable service in the negotiations with the lords, he (the Chairman) had asked Mr. Macmillan if he would take 200 shares and fill the vacancy on the board, and Mr. Macmillan had assented, and as Mr. Macmillan would probably be able to influence subscriptions to some further shares, he thought it very desirable that that gentleman should be elected on the board. It would be a most unfortunate thing to stop the mine, and if the amount required was not made up in the room, he should propose that the meeting be adjourned for a week. He might mention that if elected on the board Mr. Macmillan would fill the place of Mr. Daukes.

Mr. BLADON asked whether they had raised any ochre? —Mr. F. R. WILSON said that summer was the time to deal with the ochre, and the weather had been too bad to do anything with it.

The CHAIRMAN said they were looking forward to dry weather in order to prepare the ochre for market.

The CHAIRMAN, in reply to a further question, said that at the meeting of the company, about a month ago, a statement of the assets and liabilities of the company was laid before the shareholders.

A conversation ensued, and a general opinion was expressed that it would be a great pity and misfortune that the company should be allowed to go into liquidation. Some of the gentlemen present subscribed for shares, and the CHAIRMAN said he had no doubt the small balance required would be subscribed by shareholders who were not present.

In the end the following resolution, passed at the meeting held on the 5th inst., was confirmed:—"That it being essential in the interests of the company that some additional capital be forthwith raised, the directors are hereby expressly authorised to issue all or any of the 7676 shares now unallotted at such discount, not exceeding a discount of 50 per cent., or 10s. per share, as they may determine."

On the motion of Mr. BLADON, a vote of thanks was passed to the Chairman and directors, and the meeting broke up.

NEW VAN CONSOLS AND GLYN MINING COMPANY.

The first ordinary general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Thursday,

Mr. JOSEPH ROCK, in the absence of Mr. Pryce Jones, was voted to the chair.

Mr. JAMES COOPER (the secretary) read the notice convening the meeting, and a letter from Mr. Pryce Jones, expressing regret that he was unable to attend the meeting, as he had hoped and intended to have done. Mr. Jones added that he had made many sacrifices for the mine, and was prepared to do more for it; but if the policy of re-construction was not heartily supported by the shareholders it would be impossible to go on. In the past year they had raised more ore than in any previous year's working of the mine. He (the secretary) also read the minutes of the preceding meeting, with the view of reminding the shareholders of the decision which was then arrived at.

The CHAIRMAN said the shareholders would recollect that at the last meeting of the old company it was unanimously resolved that the affairs of the United Van Consols and Glyn Company should be handed over to the present company. The principal object they had in view was to do away with the different classes of shares, and to create shares of one uniform value, and the next thing was to re-construct the company as expeditiously and as inexpensively as possible. On this point he thought the shareholders would be fully satisfied. They engaged the services of an eminent lawyer in these matters, Mr. Stackpool, and he was happy to say that the bill for the winding-up of the old company and re-constructing it was £52, only, including £25 for stamps on the legal documents and a large amount of printing. The remuneration of Mr. Rowley Morris, the liquidator, had yet to be fixed. It would be recollected that the ordinary shares in the old company were to be exchanged for shares in the new company, subject to a call of 2s. 6d. per share, payable 1s. per share on taking them up and three instalments of 1s. 6d. each. The preference shares, which had been entitled to a 10 per cent. retrospective as well as prospective dividend, were to be exchanged in the proportion of three new shares for two old ones, with the same liability as the ordinary shares on two out of the three shares. The holders of about two-thirds of the shares had assented to the re-construction, whilst the holders of £10,000 in debentures had accepted 972 shares. The total amount received on the new shares was £14,000, 9s. 6d., in addition to which Mr. Cooper had just informed him that nearly 1000 more had been paid in that morning. Of course some of those who had assented had not yet paid. The debts of the old company, which were taken over, amounted to about £3000, and the monthly costs—salaries for the four months amounted to £1040, the costs having been reduced to the lowest possible point consistent with the development of the mine and the raising of ore. The royalties and rents paid in the four months amounted to 1000, and the interest on the debentures amounted to 1100. The London expenses were 1250, including the large amount expended on printing and postage in connection with the re-construction of the company. Of course the directors had taken nothing for their services. Three parcels of ore had been sold, realising £752, but had the price obtained been anything like a fair one they would have met the whole of the expenses out of the returns. They were thus left with about 800, towards meeting the debts.

The SECRETARY said they had actually paid off about £1500 out of the 3000 of debts.

The CHAIRMAN added that what appeared to be wanting was the unanimous support of the shareholders in carrying out of the scheme. If that were not forthcoming the thing could not go on. The Chairman also stated that Mr. F. M. Taylor had taken great interest in the mine, and had constructed a model of the workings, from which the shareholders would see the course of the operations.

The SECRETARY, in reply to a question, said the directors would at the next meeting of the board decide the limit of time within which the shares not yet applied for should be offered to the shareholders who were at present entitled to them, and after that limit should have expired the shares would be forfeited. In reply to a further question, it was stated that the debenture debt amounted to £2000.

Capt. ROACH explained the system of working which is being adopted, referring in very hopeful terms to the eastern portion of the property approaching the Van Mine, upon which there is a run of 700 yards of virgin ground. Mining experts and geologists who had visited the mine had expressed very high opinion of this portion of the ground, and there was every reason to believe that in their progress eastward very good bodies of ore would be intersected.

Mr. F. M. TAYLOR added that the mine would have paid if they had had anything like a normal price for lead.

On the motion of Mr. SANDERSON, seconded by Mr. CROSS, a vote of thanks was passed to Mr. Taylor for the trouble he had taken in preparing the model. Mr. Taylor, however, declined to receive the compliment.

Mr. J. C. BOLTON was appointed auditor, an amendment proposed by Mr. TAYLOR naming another gentleman to that position having been negatived.

On the motion of Dr. BOWLEY, seconded by Col. PERCEVAL, a vote of thanks was passed to Mr. Rock for presiding, and the meeting then closed.

HORNACHOS.—At the extraordinary general meeting, on Wednesday (Mr. Thomas Steven in the chair), the Chairman stated that Mr. Parisot, having been unable through illness to visit the mines, and having resigned his office as Chairman and managing director, the directors had sent out Mr. Thomas Rickard, to inspect and report on the mines and management there, and Mr. Thos. H. Moore had also gone out with instructions to thoroughly examine the accounts and suggest where economy can be applied without decreasing the efficiency. In the meantime,

in order to persevere the property further funds are absolutely necessary for payment of liabilities and carrying on the works with energy now that all the new machinery is finished. After various observations from some of the shareholders, the first resolution was moved by the Chairman, seconded by Mr. Heiron, and carried unanimously, authorising the directors to borrow £50,000, on 10 per cent. debentures, redeemable by yearly drawings from and after March, 1883. The Chairman then proposed the second resolution, which was seconded by Mr. Fabison, and also carried unanimously, sanctioning the increase of the capital of the company by the creation of shares, to be issued to the debenture-holders, as and when applied for in exchange for debentures. The meeting was then adjourned until such a time as Mr. Rickard should return and make his report on the mines. A vote of thanks to the Chairman concluded the proceedings.

THE TIN TRADE.

Messrs. EBELING and HAVELAAR (Rotterdam, Feb. 28) write:—No new feature has presented itself in our tin market during this month. Dulness has prevailed to a great extent, but prices have, nevertheless, been remarkably well maintained. Even this month's heavy shipments from the Straits have as yet failed to change the views of the majority of holders, who, it must be admitted, show undiminished confidence in the article at its present value. At the same time this circumstance has been the chief cause of the inactivity which still characterises our market, the trade supplying their wants in London where tin can be had cheaper. Banca has been very sparingly offered. From 56 1/2 fl. advanced to 57 1/2 fl., with a small business only. The price has since receded to 57 fl., which is our closing quotation. The demand for parcels of Billiton on the spot has again been limited. Prices during the first week of the month advanced to 56 1/2 fl. for 14 days' prompt, May delivery being dealt in at 57 fl. There has been since a decline of 1 fl., at which reduction, however, the buying was pretty general. We now quote 56 fl. for parcels on the spot, forward deliveries commanding 5 1/2 fl. more. About 11,000 peculs Billiton offered yesterday in public sale at Batavia, fetched the average price of 54 1/2 fl., costing

Mining Correspondence.

BRITISH MINES.

BLUE HILLS.—S. Bennetts, R. Harris, Feb. 23: The lode in the Blue Burrow shaft is without much change, and is yielding low quality tinstuff, but not to value. The 40 east end is worth 7s. per fathom. In the Gumpas adit west end the lode is small, and worth about 4s. per fathom.

BEDFORD UNITED.—H. Trezise, Feb. 27: North Lode: In the 115 east the lode is 3 ft. wide, strong and masterly in appearance, and worth 12s. per fathom, in the 103 west the lode is improved in size. The tribute pitches are without change. McCallan's engine-shaft is down 18 fms., below the 42, in which the lode is strong and masterly in appearance. In the 42 west the lode is 3 ft. wide, of a promising character. In the same level east the lode is much improved in appearance, composed of gossan and mundic, carrying a nice rib of ore of excellent quality. Looking at the appearance of the lode in this end I have the opinion that we are near the shoot of ore gone through in the 30. In the 30 east the drivage is continued by the side of the lode. The stopes continue to yield their usual quantities of ore. In the 20 east the lode is without change.

Feb. 29: Telegram: Lode in the 42 east improved to-day; a fine lode, worth 12s. per fathom.

BRADA.—R. Bowes, Feb. 23: There is no change to report in the 40, driving north; the level continues to open out good stoping ground. The part of the lode we are at present driving in continues to show a great deal of malachite. Altogether, the lode is of great size. The stopes behind the end will shortly fill with tinstuff. There will be considerable stoping ground opened out in this direction very soon, according to present appearances. In the 54 (Prior's end) the cross-cut named last week has proved the lode to be about 12 ft. wide, containing copper throughout. The stopes in the roof of this level are much as last reported, yielding a lot of tinstuff for the dressing-floor. The driving in the Bulwark lode is yielding good leadstuff and copper, the former quite as good as stated in last report. I am happy to say the skip is now working most satisfactorily.

CARNARVON COPPER.—J. Roberts, W. Darby, Feb. 27: The cross-cut at the 36 (Cae-y-groes) continues to look very kindly, and more spar is showing throughout the end this week. In the stopes above the 90 the men have been put a little higher up, where the ore is worth fully 2 tons per fathom. In the stopes below the 80 east the lode at present is worth fully 1½ ton of ore per fm. We have removed the men for the present from the cross-cut at the 56 (Garnon's), and put them in the Golden Venture shaft to prove the lode about 15 fathoms from surface, and where some nice ore is showing, and of which we will give more particulars next week. All other pitches throughout the mine continue much the same as last reported.

CARNAVONSHIRE GREAT CONSOLS.—W. H. Borlase, March 1: There is no change worthy of note in the 24 fm. levels, east and west of Endean's shaft, since my last report. The 24 fm. level, east of diagonal shaft, is daily improving. The men from the western end are engaged cutting the top flat, in doing which they have broken a very good pile of leadwork from the hanging side of the caunter lode. The lode in the forepart is worth fully 20 cwt. of lead per fathom, with every prospect for an improvement. I shall resume the end after finishing the plat. The engine and all other machinery are working well. I purpose sampling a parcel of about 20 tons of lead on Saturday next.

CATHEDRAL CONSOLS.—Stephen Davey, Stephen Davey, jun., March 1: The lode in the 74 driving east is 2½ ft. wide, worth about 1 ton of yellow copper ore per fathom. The other points maintain their size and value. Setting report shall be sent next week with particulars.

CONWAY VALLEY FREEHOLD COPPER.—H. B. Vercoe, March 1: I am pleased to be able to report that the mine is again free of water; the bottom of the engine-shaft has been cleared up, and to-day we have blasted two or three holes in the lode. From these blasts we got some fine specimens of quartz and copper ore. We shall hurry on the sinking of the remaining 2 fms. as fast as possible, and have a full set of 12 men engaged thereon. In my next report I shall be able to give you more news as to the appearance of the lode, and shall be winding on our staff daily from the sinking operations. I am more confident than ever that the 40 fm. level will show a great improvement, the character and composition of the lode being far superior to what it has been in any of the shallower workings.

CWM DWYFOR AND BRYNARIAN.—John Davies, Feb. 23: Joseph's Level: The lode does not look so well as when I last reported—it is narrower; the water coming from the end is more than for some time past. We are able to make better progress now the air-pipes are in Pensarn. The lode here is not so wide as it has been, but it looks favourable, it keeps its regular course with a well-defined wall, but it is very dry; no joint of any kind has crossed the level yet.

D'ERESBY MOUNTAIN.—J. Roberts, W. Sandoe, Feb. 23: The No. 5 end driving south has improved a good deal in appearance. The part of the lode close on the heading is much the same as it was a week ago, but there is a good ore part nearer to the hanging-wall which is failing fast into it, and will, no doubt, on the junction make a really good improvement. This end is now in within about 5 fms. to the perpendicular of the Blindman's Bunch at No. 4, and should this dip north we shall be into it very soon, for we do not see any reason why this should not hold down as well as the other bunch. The men of the north end at the No. 5 have been a part of the month stoping in the bottom of the level. The lode in this end is not so good as it has been, worth about 1 ton of lead to the fathom. The stopes to the north of the rise are worth about 1½ ton of lead to the fathom. The stopes to the south of the rise are worth about 1 ton of lead to the fathom. We shall sample 20 tons of lead on Friday next.

DEVON FRIENDSHIP.—J. Daw, March 2: We have nothing new to report since last week; we are waiting for things from foundry.

DEVON GREAT CONSOLS.—J. Richards, March 1: Wheal Emma—Inclined Shaft: In the cross-cut north as the 137 east the ground continues tolerably favourable for progress, and is congenial for the production of mineral. New Shaft—New South Lode: In the 115 east another portion of the cross-course has been intersected, which has again displaced the lode. The drivage is still being continued east to get beyond the influence of the cross-course, and as soon as it is sufficiently advanced a cross-cut will be put out north for intersection of the lode, in which direction it is considered it will be found. Railway Shaft: In the 205 west, on the south part of the lode, the drivage is being continued by the side of the lode for more speedy progress. In the 190 west, on the south part of the lode, the lode is 3½ ft. wide, of a promising character, and yielding small quantities of copper and mundic ores. In the 160 west, on the south part of the lode, the lode (part carrying 4 ft. wide) is composed of capel and quartz, with peach, mundic, and a little good quality copper ore. Watson's: In the 100 west of the engine-shaft, the lode is 5 ft. wide, composed of capel, quartz, peach, mundic, and a little copper ore, of good quality. In the Watson's, sinking below the 20, the ground continues tolerably favourable for progress, and congenial for the production of mineral. In the 20, east of the Watson shaft, the lode is 3 ft. wide, yielding some saving work of copper and mundic ores.

DEVON GREAT UNITED.—J. Richards, March 1: In the 120 fm. level, east of Willesford's shaft, the lode is 3½ ft. wide, composed of strong capel and quartz, with peach, and small quantities of copper and mundic ores. The distance driven during the past week is 3 feet. In the 120, west of Willesford's shaft, the lode is 2 ft. wide, yielding a little copper and mundic ores. The distance driven during the past week is 3 ft. 6 in. In the cross-cut north at the 60, west of Watson's shaft, on the middle lode, the ground is not quite so favourable for progress. The distance driven during the past week is 6 ft. In the 60, west of Watson's shaft, on the middle lode driving west of cross-cut south on south branch, the ground is without much alteration. The distance driven during the past week is 5 ft. In the 60, west of Watson's shaft, on the Capel Tor lode, the lode is 1½ ft. wide, composed of capel and quartz with a little copper and mundic ores. The drivage is suspended to admit of a winze being sunk in the bottom of the lode, the lode in which is 2 ft. wide, and yields some good quality copper and mundic ores.

DRAKE WALLS.—Moses Bawden, March 1: We are pleased to inform you that on Saturday last we made the communication at the deep adit between the engine-shaft and Brentor shaft, thus completing the deep adit to the full extent of our workings; the importance of this to the company we cannot over estimate. The men are now engaged putting in launders and taking up water from the western ground, so that it may be conducted through deep adit to the river Tamar. Saturday next being our setting, a detailed report will be for warded to you next week.

EAST BLUE HILLS.—S. Bennetts, W. K. Mitchell, Feb. 23: The lode in the adit east end continues to look highly promising; is about 2½ ft. wide, and worth 10s. per fathom. A stoppage some 15 to 20 fathoms behind this end is worth 10s. per fathom, and the one adjoining it to the west is worth 7s. per fathom. In the 40 east end there is not much alteration to report. The lode being in a somewhat unsettled state, 1½ ft. wide, composed of low quality tinstuff.

EAST BOTALLACK.—T. Trahair, March 1: We have finished the cutting down of engine-shaft to the adit level, and have timbered the same, and are getting the derrick ready to haul the tinstuff early next week, after which we shall commence sinking on the new lode.

EAST CARADON.—W. George, March 1: The horse between the two south branches now being driven on at the 130 is getting smaller, and we think the branches will soon come together, which previous to our meeting with a small crossing were yielding 1½ ton of ore per fathom, but are now a little disordered. In a winze sinking below the 90, west on Child's, the lode is worth 1 ton per fm. The 70, east on this lode, looks very promising, and is yielding 1 ton of ore per fathom. There is no alteration in our stopes or pitches to notice.

EAST CHIVERTON.—R. Southey, March 1: Since my last, I am pleased to say, the north and south lode at the 100, west of the engine-shaft, is looking equally as well as when last reported on, worth fully 1 ton of silver-lead per fathom. The north end is being driven by four men at 4½ fm. per fathom; and south by six men at 5 fm. per fathom. In the south end the lode is very large, rather more than the end big (an end is generally driven 4 ft. wide), and just in the centre of the end we have cut a large vug, from which a great quantity of water is issuing, and some fine specimens of silver-lead are being taken out; therefore, judging from present appearances, I am strongly of opinion an improvement is near at hand. I have also put men in the 90 to strip out the north wall of the east and west lode, in order to find the north and south one. I shall be able to report more fully in my next. Since getting our steam-whim at work I am glad to state good progress is being made in our underground operations with much easier cost.—Surface: Our dressing hands are preparing a parcel of silver-lead for the market. I shall very shortly sample 50 tons. When we get our winze through on the north and south lode the quantity will be increased. We are now well equipped with machinery, all of which is working splendidly. Should this new (north and south) lode continue to open up as present, and I have every reason to believe it will, the shareholders may with safety congratulate themselves on having a very valuable property, which will remunerate them for their patience and outlay.

EAST DEVON CONSOLS.—J. Browning, March 1: During the last week the weather has been very favourable for our work. The water in the engine-shaft does not materially affect us now in sinking, so that fair progress is being made. I find our shaft to be going down in the right place, and it is my decided opinion that we shall soon cut into a rich course of copper. Our prospects of success were never better.

EAST LONG RAKE.—H. B. Vercoe, March 1: The lode in the sump sinking in the sole of the 50 west has not been so productive during the last few days; to-day, however, it looks very much better, the cavity referred to in my last report being more open, and producing splendid lumps of bright and pure galena, and promising for further improvement. The lode in the 40 west continues to produce good lumps of ore, but not yet in regular quantities. There is a gradual

improvement, and doubtless this will continue until we reach the junction of the lode and the great flat, where we expect a rich body of ore. We are laying the tramroad in the 50, from the shaft to the western workings. The skip-road answers admirably.

EAST WHEAL ROSE.—W. Skewis, T. Dodge, Feb. 26: Penrose's Engine-shaft: The timber, &c., is all in its place to receive a 10-in. lift, which will be fixed in the course of this week. After this is done we shall fork the water much faster. There is no change in the stopes to notice. They are still worth from 5 cwt. to 30 cwt. per fathom. The tribute pitches are looking rather better. The engineers are all employed in putting the 10-in. cylinder engine together as fast as possible; when this is done we shall fork as fast as the men can do their work in the shafts.

GAWTON.—G. Rowe, G. Rowe, jun., Feb. 24: The lode in the 117 fm. level end is improving, producing 8 tons of arsenical mundic, with fine stones of ore, per fathom, and showing a very kindly appearance for further improvements shortly. The lode in the Nos. 1, 2, 3, and 4 stopes in the back of the 117 is worth in the aggregate 60 tons of mundic and copper ore per fathom. The lode in the winze sinking below the 105 fm. level is worth 12 tons of mundic per fathom. The lode in the stope in the bottom of the 95 fm. level is yielding 7 tons of mundic per fathom. The lode in the rise in the back of the 70 fm. level is worth 10 tons of mundic per fathom. The lode in the 20, east of cross-course, are worth 10s. per fathom each. The bottom just behind the end is worth 10s. per fathom. One stope in the back is worth 5s. per fathom. Stope in the back of the 10, east of cross-course is worth 6s. per fathom. Our other bargains are much the same as last reported.

KIT HILL GREAT CONSOLS.—Isaac Richards, March 1: At the tunnel level the ground is a little more favourable for progress. The distance driven during the past week is 1 fm. 5 in. In the north engine-shaft, sinking below the 75, the lode is 3 ft. wide, and yields good stones of copper and tin ores. The distance end west letting out a large stream of water, and producing a little tin. Two stopes in the back, east of cross-course, are worth 10s. per fathom each. The lode in the 20, east of cross-course, is 1 ft. wide, unproductive. Stope in the bottom just behind the end is worth 10s. per fathom. One stope in the back is worth 5s. per fathom. Stope in the back of the 10, east of cross-course is worth 6s. per fathom. Our other bargains are much the same as last reported.

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KIT HILL GREAT CONSOLS.—Isaac Richards, March 1: At the tunnel level

the ground is a little more favourable for progress. The distance driven during the past week is 1 fm. 5 in. In the north engine-shaft, sinking below the 75, the lode is 3 ft. wide, and yields good stones of copper and tin ores. The distance end west letting out a large stream of water, and producing a little tin. Two stopes in the back, east of cross-course, are worth 10s. per fathom each. The lode in the 20, east of cross-course, is 1 ft. wide, unproductive. Stope in the bottom just behind the end is worth 10s. per fathom. One stope in the back is worth 5s. per fathom. Stope in the back of the 10, east of cross-course is worth 6s. per

will now yield 14 cts. of ore per fathom. Our prospects are now better than we have ever seen them before since we commenced operations, and in a few weeks I hope we shall be able to meet all cost and a little over if possible.

NORTH PENSTRUTHAL.—Stephen Davey, William Polkinghorne, March 1: Setting report. The Highbrow shaft, sinking below the 132, is down 12 fms. Sunk last month 11 ft. 8 in., by eight men and four boys. The sinking last month was not so good as in the previous month, owing to the increase of water from incessant rains. The 132 is driven west of shaft 17 fms. 2 ft. Driven last month 4 fms. 1 ft. 10 in., by six men; lode 3 ft. wide, producing a little tin. The 130 is driven west of shaft 63 fms. 4 ft. Driven last month 1 fm. 4 ft. 8 in.; lode poor. The winze in the bottom of the 88 is sunk 11 fms. Sunk last month 1 fm. 1 ft.; no change in the lode. The 58 cross-cut is driven north 76 fms. 1 ft. Driven last month 1 fm. 4 ft. 7 in., by four men, at 12 ft. per fathom. Ground at present hard and slow of progress. No other change to remark.

NORTH TREBESKERY.—Pryor and Son, March 1: We are pushing the driving of the deep adit cross-cut north of Scourier Consols engine-shaft, by six men and one labourer, with all possible speed to reach the Great Flat tin lode. Saturday last being our pay and setting we again set to the men at 42 per fm. for the month, or cut the lode; this end is letting out water freely as if running a lode or branch, and the ground is of the most congenial character for the production of mineral, being in a beautiful channel of clay-slate. The repairs in connection with Highbrow shaft are being executed vigorously. The masons and carpenters are making good progress in repairing the roofs of the winding and crusher house, also that of the 56 in. engine and boiler-house, in order to start the same for the effectual draining of the rich copper lode. This shaft (Doctor's) should be sunk as fast as possible by the rock-drilling machinery to reach the 110, 120, and 130, where large reserves of copper ore are now standing; this has been referred to before.

OKEL TOR.—H. Bulford, J. Rodda, March 1: Good progress continues to be made in squaring down the new shaft east below the 65. The ends and stope are looking just the same as reported last week.

OLD SHEPHERDS.—R. Nancarrow, J. Nancarrow, Feb. 28: In handing you our fortnightly report we are glad to consider the floods we have had, good progress has been made in clearing up and forking the water in Harvey's engine-shaft, while many mines in the country are flooded. Our engine and pitwork are working splendidly, and we have no doubt as the season advances still further progress will be made. The old sump shaft is still being cleared by a full staff of men. Here we have found the ground very badly crushed, but at present we are glad to say the shaft is in a better condition, and hope it will further improve. We have also a pair of men clearing the cross-cut north of this shaft at the 26, so as to reach the lode and effect a communication with the same level coming back from Teag's shaft, where we expect to find ore ground available for tribute. Teag's shaft is now cleared and secured to the 54 below the adit level, and in a few days we shall be opening east and west on the course of the lode, where, judging from the level above, good results may be expected.

In the 44, west of Teag's shaft, we find in taking down the hard part of the lode left standing to be quite up to our expectations, and north 15 cts. of silver-lead ore per fathom. In clearing the 44, east of this shaft, we have just met with a branch of lead ore in the south side, which, as far as seen, is worth 5 cts. of silver-lead ore per fathom. This being the deepest level we have yet seen of the lode looks very encouraging for the future of the mine. There is no change in clearing the 34 east and west of this shaft on the main lode. The caunter lode still retains its value, or rather improved, since our last report; worth to-day from 1 to 2 1/2 tons of silver-lead ore per fathom. The part of lode being worked on in the 26 east is worth 7 cts. of silver-lead ore per fathom. Every possible effort is being made to get our skip road fixed by the time the drawing-engine is ready. Our dressing is progressing favourably for another pair of lead ore for the market.

PARYS COPPER CORPORATION.—T. Mitchell, March 1: The lode in the 85, east of the cross-course, has not been looking so well during the last few days, yielding only about 2 tons of ore in a fathom, the lode having been disordered by a hard bar of spar and chert, intermixed with sulphur, but to-day the ground is changing for the better, and the lode is again improving. Surface operations are going on in the usual order. Another cargo of old iron has been ordered for the precipitation pits, and we are also looking forward for some settled dry weather, so as to enable us to prepare the ochre for market, for which there are many enquiries.

PENHALLS.—S. Bennetts, J. Goyne, Feb. 28: The south section of the lode in the 60 east end is worth 7 cts. per fathom. In the west end, on the same part, the lode is at present poor. On the Balduin lode the 40 west end is producing some low-quality tinstuff, but not of much value. The stope in this level are turning out fairly well.

PHENIX AND WEST PHENIX UNITED.—J. Truscott, March 1: Setting Report. Old Sump Shaft: To cross-cut the lode at the 150 west, by two men, at 24 per fathom; the lode at this point is a little disordered, being intermixed with granite. The 130 to drive west, by two men, at 10 cts. per fathom; worth for part carried 7 cts. To stop the back of this level, by four men at 42 per fathom, worth 10 cts. The 120 to drive west, by two men, at 42 per fathom, worth 7 cts. To stop the back of this level, by six men, at 42 per fathom, worth 12 cts. The 110 to drive west, by two men, at 10 cts. per fathom, worth 8 cts. To stop the bottom of this level, by two men, where the lode is worth 20 cts. per fathom. To stop the back, by four men, at 22. 5s. per fathom, worth 14 cts. The 100 to stop the back of this level, by four men, at 31. 10s. per fathom, worth 10 cts.; No. 2 stop, by six men, at 22. 5s. per fathom, worth 10 cts.; No. 3 stop, by six men, at 32. per fathom, worth 10 cts. The 60 to drive west, by four men, at 10 cts. per fathom, worth 8 cts. No. 1 stop at the back of this level, by six men, at 32. per fathom, worth 12 cts.; No. 2 stop, by six men, at 32. per fathom, worth 12 cts.; No. 3 stop, by six men, at 32. per fathom, worth 12 cts. The 50 to drive west, by four men, at 10 cts. per fathom, worth 8 cts. The 40 to drive west, by four men, at 10 cts. per fathom, worth 8 cts. The 30 to drive west, by four men, at 10 cts. per fathom, worth 8 cts. The 20 to drive west, by four men, at 10 cts. per fathom, worth 8 cts. The 10 to drive west, by four men, at 10 cts. per fathom, worth 8 cts. The 5 to drive west, by four men, at 10 cts. per fathom, worth 8 cts. The 2 to drive west, by four men, at 10 cts. per fathom, worth 8 cts. The 1 to drive west, by four men, at 10 cts. per fathom, worth 8 cts. The 10 to drive east, by two men, at 5 cts. per fathom, worth 5 cts. The 20 to drive east, by two men, at 5 cts. per fathom, worth 5 cts. 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Notices to Correspondents

COTTON POWDER COMPANY.—*Erratum.*—In the notice of the meeting of this company, in last week's Journal, it should have been stated.—The present year would show still better results, the company's works having been considerably enlarged would afford ample facilities for meeting (not treating) the increasing demand for tonite.

Received.—"One Interested" (Kimberley)—"Shareholder" (East Botallock)—"A. D."—"Reader" (Glasgow)—"T. C." (Truro)—"Nemo"—"Shareholder" (Dolcoath)—"W. R. M."—"J. H."—"T. M." (Dublin)—"Old Reader" (Bristol)—"Shareholder" (Hoover Hill).

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, MARCH 3, 1883.

CERTIFIED MANAGERS OF MINES.

A good many mining engineers just now are greatly exercised with respect to the judgment given recently by Lord COLERIDGE with respect to the interpretation of the 26th section of the Mines Regulation Act of 1872, special reference to which was made by the President of the Midland Institute of Mining Engineers, at the meeting at Leeds on Thursday last. The President suggested that the subject should be brought forward at the next meeting to consider the decision come to by Lord COLERIDGE, which has a most important bearing on the position of a considerable number of mining engineers in all parts of the kingdom. The appeal of PLANT *v.* the CHEADLE VALLEY COAL AND IRON COMPANY, and the judgment given in connection with it, bears out the views we have several times expressed with respect to the section of the Act of Parliament relating to the appointment of the managers of mines. On the occasion of an explosion which took place in the West Riding of Yorkshire, resulting in the deaths of a considerable number of miners, it was proved before the coroner's enquiry that the certified manager was several miles away from the scene of the catastrophe when it occurred, seldom visited the place, gave instructions as to the working operations to be carried on from the reports received at his house or office from the underviewer, and also held certificates as manager of several other mines. This system has become pretty general, and it has been held by the parties interested in it that one engineer can hold any number of certificates, and so become the manager of several mines. This, we have contended, is opposed to the correct reading of the Act of Parliament, and our views have been confirmed by the judgment of Lord COLERIDGE in the decision in the appeal case to which we have alluded. His lordship held that it was the duty of the manager in charge of a mine to be constantly either in the mine itself or on the surface, so that in the event of anything taking place requiring prompt action he would be ready to take the direction. Consequently no manager holding a certificate could absent himself from the mine in his charge, and could, therefore, only hold one certificate. This, of course, is the material point which will affect a good many gentlemen, as it will prevent them from holding a plurality of certificates; but it is evident that the management will be best where an experienced and intelligent mining engineer has only one mine to look after instead of half-a-dozen or more.

This was evidently the intention of the framers of the clause in the Act of 1872, the Act itself in fact having been introduced principally for securing increased safety to the miners. But the 26th section, to our thinking, cannot be fairly interpreted otherwise than it is intended by it that a mining engineer can only hold a certificate as manager of one mine. By the clause it is enacted that "Every mine to which this Act applies shall be under the control and daily supervision of a manager, and the owner or agent of every such mine shall nominate himself or some other person (not being the contractor for getting the mineral in such mine, or a person in the employ of such contractor) to be manager of such mine." This appears plain enough, one would think, and we cannot see how the term "daily supervision" can be construed to mean written supervision, which some of the pluralists hold to be an intelligent reading of the clause. There is to be a manager for every mine to which the Act applies, and not one manager for ever so many mines. Such is the interpretation of Lord COLERIDGE, and as it does not appear it will be appealed against we certainly think it ought to be carried out to the full extent. If it is, no doubt it will affect the emoluments of those gentlemen who have contravened the Act by holding several certificates, but who have by so doing kept a good many mining engineers of experience and ability out of employment. There is no dearth at the present time of able mining engineers, and our new colleges and other educational mining establishments will now considerably increase the number, so that it would be most unfair to allow the monopoly of certificates to be continued longer, seeing that it is opposed to both the letter and the spirit of the Act of Parliament, as it is also opposed to the interests of the mining profession. The working miners, too, would be more satisfied with knowing that there was a manager always on the ground to superintend the working operations than they would be when they knew that they were acting under the superintendence of a deputy taken from their own body, without any scientific knowledge with regard to guses or ventilation.

As we have previously stated, there is evidently no intention to question the legality of the decision come to by Lord COLERIDGE, therefore we consider the law from his point of view should be enforced without much delay, for, as the President of the Midland Institute remarked in calling attention to the subject, that if the decision given was good an Act of Parliament would be required to alter it. But, we believe, were any attempt made to allow of mining engineers holding certificates for more than one mine it would not find a dozen supporters in the House of Commons, whilst it would meet with the strongest possible opposition from the representatives of the working miners throughout the kingdom, and through them from the Trades Association's Parliamentary Committee, which has a considerable amount of influence.

But few of our mineowners are probably aware of the risks they are running in not carrying out the provisions of the Act of 1872, according to the interpretation put upon the 26th section by Lord

COLERIDGE. They should, therefore, be aware that by the section alluded to it is provided that, "If any mine to which this Act applies is worked for more than 14 days without there being such a manager for that mine as is required by this section the owner and agent of such mine shall each be liable to a penalty not exceeding £50, and to a further penalty not exceeding £10. for every day during which mine is so worked." It will be seen that the penalties for contravening the 26th section of the Act are very high, whilst we may say they can be recovered in the manner directed by the Summary Jurisdiction Act before a Court of Summary Jurisdiction. Should no notice be taken of the decision given by Lord COLERIDGE we have every reason to believe that the question will be brought forward in one of the ordinary courts, so that those mineowners who are affected by the section of the Act alluded to would do well to consider their position.

THE PRODUCTION OF COAL.
MINERS' WORKING AND WAGES.

From returns just received it appears that the quantity of coal raised in 1882 was 156,500,000 tons, being an increase of 2,313,000 tons over the previous year. This would show that the consumption and production at home have nearly balanced each other, seeing that the output in 1881 was 7,217,300 tons more than in the previous year. So far as household consumption is concerned, it is evident that advantage has been taken of every improvement calculated to minimise the quantity used for ordinary purposes, whilst so far as regards the expenditure of fuel for the smelting of metallic ores the lowest point has not yet been reached, but greater efforts will now be made in that direction by the attempts being made by the miners to advance the price of coal. From the same cause also we may expect that more favourable systems of working coal will be adopted, for it is admitted that notwithstanding considerable improvements in the general system of coal mining, and the utilising of slack and dust for coke-making and other purposes, yet a good deal of the material is wasted by bad working and carelessness. There does not appear any reason why by the various modes of working coal there should be a loss of from 10 to 15 per cent., as is the case, for pillars are left standing that should be carried away, and extensive barriers are left against the influx of water owing to the want of reliable plans by which the exact boundaries could be determined. But we have the fact of a marked diminution in the increase during last year, and it is by no means improbable that this will continue to be the case for some years to come until the output becomes stationary for a time, to be followed by a gradual decrease in the drain upon our reservoirs of fuel.

The miners are now doing all they can to bring this about earlier than would otherwise be the case, and they will, of course, be the sufferers in the long run, for they are not guided by the light of past experience. They complain that there is an excess of production over consumption, and that the latter must be diminished to a marked extent for their benefit. No doubt there are now more coal mines than are actually required to meet our home and foreign requirements, but for this state of things the miners have only themselves to blame. A few years ago, when the productive power of the country was not equal to the demand, they decreased the output whilst enjoying exceptionally high wages, and so caused the opening out of new coal mines in nearly all parts of the kingdom; and they now complain of the result brought about by their own conduct. Indeed, they are now attempting to initiate the same policy which has been so injurious to themselves as well as their employers. That this has been the case we need only draw attention to the quantity of coal raised per man during the last 10 or 12 years to bear out the remarks we have made. The following figures show the quantity of coal raised yearly, the number of persons employed in and about the mines under the Coal Mines Act, the output per man, and the price of the best coal over the ships' sides in the Thames.

	Tons raised.	No. of employed.	Tons p. man.	Price p. ton.
1870	107,427,557	345,446	314	17s. 5d.
1871	117,352,000	370,881	316	18 2
1872	123,497,300	418,088	291	23 10
1873	127,016,700	512,199	248	31 3
1874	125,067,900	538,829	232	24 8
1875	131,867,100	535,845	246	22 9
1876	133,344,800	514,532	259	20 2
1877	134,610,700	494,391	272	18 5
1878	132,610,900	475,329	279	16 10
1879	133,808,000	476,810	281	16 11
1880	146,969,000	484,933	303	14 11
1881	154,184,300	495,477	311	15 3
1882	156,500,000	501,000	312	15 6*

* Estimated.

From the above will be seen the years of highest prices and the rate of advance or decline. In 1870, when the price of coal was low and the miners' wages were in similar state, there was towards the close of it a movement of a favourable character, and this increased to some extent in the following year. In 1872 wages and prices went up together, and it will be seen that the result was a considerable decrease in the output per man from 316 tons in 1871 to 291 tons. Notwithstanding the fact that owing to the high wages paid to miners many men from other businesses went into the mines, the number having increased from 418,088 in 1872 to 512,199 in 1873, yet with this marked addition to the number of men employed in and about the mines the individual output decreased from 291 tons to 218 tons. Now, had the men in 1873 raised as much per man as was the case in 1872 they would have got 4,046,773 tons more than they did. But the high wages led the men to work only four or five days a week, and so long as the output was kept down so long were high wages and profits maintained. But a day of reckoning was fast approaching, induced by the high rates charged for coal and the limitation of the output on the part of the miners. Companies were formed and some millions of capital were invested for the purpose of purchasing old collieries and opening out new ones, so that in the course of a very few years there was more coal produced than was required. In fact, the productive power of the country has increased too rapidly, owing to the peculiar state of things which prevailed in 1872 and 1873, and for this no persons are more to blame than the miners themselves, for it will be seen by a reference to the figures we have given that they worked more or less according to the wages they received, and these were in a great measure regulated by the price of coal itself. As an illustration of this, if the year 1873 is taken it will be found 512,199 persons raised 127,016,700 tons of coal, whilst in 1882 it only required 501,000 workmen to get 156,500,000 tons. This shows plainly the effect that wages has upon the individual production, and it need scarcely be said that if the miners had worked anything like as hard in 1873 as they did in 1882, they would now be in a very different position to what they are, for there would be a considerably less number of coal mines than there are, and as the productive power would not be in excess of the consumption, the profits and wages of mineowners and miners would be very different indeed to what they are, and there would be no necessity for attempting to reduce the output of coal by artificial means.

THE NEW STEEL RAIL WORKS AT WORKINGTON—THE GREAT STEEL RAIL ORDER.—One of the largest orders for steel rails that has been placed for a long time is that just given out by the Government of New South Wales for 72,000 tons, and which, it is said, has been allotted to Messrs. Cammell and Co. (Limited), of the Cyclops Works, Sheffield. Some short time since the company purchased the steelworks at Dronfield, in Derbyshire, from Messrs. Wilson and Cammell, and determined to remove them to Moss Bay, near to Workington, and it is stated that the new works will be opened by the commencement of the South Wales order. But this is scarcely likely to be the case, seeing that the new works are far from being completed, whilst the company have an establishment at Penistone, near Barnsley, which produce more than 2000 tons of steel rails weekly. With respect to the new works at Moss Bay, which will be amongst the most complete of the kind, the weather has retarded operations so far as the buildings are concerned, but there are two fine chimney stacks completed, and the boiler beds are all but finished. Men have been engaged on the foundations for the engines,

and one of the large single-storied workshops is nearly roofed in. The foundations of the other shops or sheds have also been completed, so that the building will not take so long running up; but, as it is, there is a vast quantity of bricks and similar material lying about, covering a considerable space of ground, showing that the buildings will be on a most extensive scale. The engines, boilers, and machinery are on the ground ready for being fixed, and as there are a large number of hands employed, with the existing fine weather, the progress towards completion is now expected to be rapid. Considerable headway has been made on the line of railway from the shore to the works, by which the latter will have direct communication with the Lonsdale Docks at Workington. The dock, it may be said, is now unequal to the accommodation required, for only last week there was an addition to the ordinary craft of five steamers, varying from 1000 tons to 1500 tons each, besides smaller craft, which kept the men and cranes fully going to a late hour on the Sunday night. At Maryport a fine dock, capable of accommodating the largest steamers, is expected to be finished by September, and it is anticipated that advantage will be taken of it by Messrs. Cammell for the shipment of their rails. The new works will add nearly 2000 to the present population of the locality.

THE BESSEMER AND OPEN HEARTH STEEL TRADE IN 1882.

We are favoured with advance sheets of the annual statistical reports of the Bessemer Steel Trade in 1882, and of the production of Open Hearth Steel in the same year, prepared under the auspices of the British Iron Trade Association, by Mr. J. S. JEANS, the secretary. The total production of Bessemer steel ingots in the United Kingdom in 1882 was 1,673,649 tons, which is an increase of 231,930 tons on the production of the previous year. This increase is, however, 165,407 tons less than that of 1881 on 1880, the latter having been the greatest advance made in any one year in the history of the trade. In 1882 the total production of Bessemer steel rails in the United Kingdom was 1,235,785 tons, an increase of 212,045 tons on the production of 1881, against an advance on the latter year of 283,830 tons on the production of 1880. Of the total quantity of ingots produced in 1882, 74 per cent. were manufactured into rails, against 70 per cent. in each of the two years 1881 and 1880. In 1882, therefore, the proportion of rails to ingots was 4 per cent. more than in either of the two preceding years. Appended are statistics of the quantities of Bessemer steel ingots produced in each district of the United Kingdom in each of the last two years, with amount of increase:—

District.	Ingots, 1881.	Ingots, 1882.	Increase.
South Wales...	384,656	483,086	98,430
Sheffield	392,812	420,000	27,188
Cleveland	264,986	326,924	61,938
Lancashire.....	227,465	239,983	12,518
West Cumberland...	162,775	191,326	28,551
Staffordshire	9,025	12,330	3,305

Total 1,441,719 1,673,649 231,930

The greatest increase of production appears in the South Wales district, where it amounts to 98,430, or 25 per cent. In the preceding year South Wales produced 76,423 tons of ingots more than in 1880, the aggregate increase of production within two years having been 174,853 tons. During 1882, the Tredegar Company, in South Wales, have commenced to manufacture Bessemer steel with two converters, which are calculated for an aggregate annual output of about 70,000 tons. Cleveland has followed South Wales with an increase of 61,938 tons on the output of 1881. In the latter year the output was 120,986 tons larger than in 1880. Within two years, therefore, the output of Bessemer steel in this district has increased by 182,924 tons. In 1880 Cleveland and South Wales unitedly produced 452,233 tons of ingots, or 43 per cent. of the whole output of the country. In 1882 their production was 810,010 tons, or 49 per cent. of the whole. The production of Bessemer steel rails in the United Kingdom for each of the last two years, with amount of increase in each district, is appended:—

District.	Steel Rails, 1881.	Steel Rails, 1882.	Increase.
South Wales...Tons	305,043		

ductiveness of the converters at work in 1882 as compared with any preceding year—thus the average annual yield per converter in 1879 was 12,641 tons; in 1880 it increased to 13,125 tons; in 1881 it further increased to 17,552 tons; and in 1882 to 20,920 tons. But while the converters in work have averaged 3338 tons per converter more than in 1881, there is a large amount of variation in the yields obtained in the districts, the averages of which have been—

District.	Con- verters.	Production of Ingots. Tons.	Av. per Converter. Tons.
South Wales	19	483,086	25,425.58
Sheffield	26	420,000	16,153.84
Cleveland	12	326,924	27,243.66
Lancashire	14	239,983	17,141.64
West Cumberland	7	191,326	27,332.28
Staffordshire	2	12,330	6,165.00

The best result obtained at individual works was 78,202 tons with two converters—an average of 39,101 tons per converter; while at another works the average yield per converter amounted to 31,178 tons. The former is believed to be the best record that has yet been made in the United Kingdom in Bessemer practice. With such excellent practice throughout the country the work done last year by 80 converters might be accomplished by 46.

The total quantity of Bessemer steel plates manufactured in the United Kingdom during 1882 was 33,500 tons, against 21,989 tons in 1881, and 21,500 tons in 1880. Of the 23 works engaged in producing steel of this description, nine turned out in 1882 quantities of plates varying from 14 to over 10,000 tons. As in the preceding year, a large trade was done in blooms during 1882, chiefly on American account. The total quantity produced was over 130,000 tons.

As to the production of open hearth steel in 1882, returns obtained from the steelworks, and verified by Dr. Siemens, show the production last year to have been 436,000 tons, against a production of 338,000 tons in the preceding year. This figure is an increase of 98,000 tons, or 29 per cent, on the production of 1881, which in its turn was an increase of 87,000 tons, or 34.6 per cent on the production of 1880. Within the last two years, therefore, the production of open hearth steel in the United Kingdom has increased by 185,000 tons, a quantity which is 10,000 tons in excess of the whole production of the country in 1879. The production of open hearth steel in each district of the United Kingdom during each of the last two years, with amount of increase in the latter year, was:—

District.	Production. 1881.	Production. 1882.	Increase in Decrease 1882.
Scotland	102,000	213,000	+ 111,000
South Wales	159,500	129,500	- 30,000
Sheffield	34,000	42,000	+ 8,000
North-West Coast	24,000	17,000	- 7,000
North-East Coast	12,200	6,000	- 6,200
Other Districts	6,300	28,500	+ 22,200

Totals 338,000 436,000 + 98,000

It will be noted that during 1882 Scotland has more than doubled the production of open hearth steel. This is due mainly to the demand on the spot for open hearth steel plates, of which more than 150,000 tons were produced during the year.

The total quantity of both Bessemer and open hearth steel produced in the United Kingdom in 1882 was 2,109,649 tons. In 1879 the corresponding production was 1,009,511 tons. Within four years, therefore, the production of these two descriptions of steel has more than doubled in Great Britain. The number of firms actually engaged in the production of open hearth steel in the United Kingdom during each of the last three years has been 20 firms, 27 firms, and 35 firms respectively. The number of open hearth furnaces erected in the United Kingdom at the end of each of the last three years has been 120 furnaces, 149 furnaces, and 163 furnaces respectively. The average annual production of the open hearth furnaces actually at work in the United Kingdom during each of the last three years has been 2540 tons, 2925 tons, and 3114 tons.

ECONOMIC GENERATION OF HEAT AND STEAM.

Reference was made in the *Mining Journal* of Feb. 17 to the improved boiler flues, furnaces, and funnels invented by Messrs. LIVET and WERY, and as their merits are very fully discussed in the report of Mr. D. K. Clark, C.E., in connection with the Smoke Abatement Exhibition, it may be further noticed that not only was the evaporation extremely high but the steam was proved to be remarkably dry, which is the only true test of evaporation, as often when to all appearances the evaporation seems good, it is found that the water is being forced into the engine, &c., and, therefore, the result is fallacious. It appears that the boiler at Messrs. Clay, Sons, and Taylor's was short in proportion to its diameter, and consequently not so economical in point of heat, and that it was reset upon this system, and began work on Sept. 1, 1879, two years before the tests were made, and that the same set of fire-bars which were used for the tests had been regularly used for nine months before they began, during all which time anthracite had been burned; also that the boiler during the whole time was doing its ordinary daily work, and was not exceptionally treated in any way—except on one occasion, when more extraordinary results than usual were obtained by careful stoking—and lastly, that the steam generated was specially tested by Mr. D. K. Clark, and found to be remarkably dry. These facts suffice to prove the invention to be of practical commercial value.

This system, says Mr. Clark, though not professedly a smoke preventer, possesses nevertheless a considerable degree of efficiency for preventing smoke. It is stated by Messrs. Tate and Sons, of Silverton, that, according to their experience, the evaporative efficiency of their boilers, burning 6 cwt. of coal per hour per boiler, has been increased from 6.39 lbs. of water, supplied at 66° Fahr. per pound of coal to 7.40 lbs. by the substitution of Mr. Livet's system of setting boilers. With regard to Wery's apparatus, known as the atmospheric chimney, it is mentioned that it is designed to accelerate the combination of the atmospheric oxygen and unconsumed gases which rise from the fire at high temperature. For this object a winding or rotating movement is impressed upon the elements in the chimney, which it appears is extended to the body of gaseous elements in the furnace; so that in winding the gases spirally, instead of ascending direct, more time is provided for mixing at a high temperature, and the mixture is better effected. This function is most simply exemplified in the case of vertical boilers having cylindrical iron chimneys. The tests were made on a vertical boiler having a fire-grate of five square feet in area. The lower part of the chimney was encased in a jacket for a height equal to three diameters. The external air was admitted into the jacket at the base, and in ascending it entered the chimney through two spiral slits 1.16 in. wide at the base, gradually enlarging to $\frac{1}{2}$ in. in width at the top of the jacket, each slit making one revolution. The air entering through the slits mingled with and communicated a winding movement to the ascending hot gases, which appeared to be extended downwards by induction to the body of gases in the fire-box, wherein when the door was opened the circling movement could be observed. It appears from the results of the tests, which were made repeatedly, that the evaporative efficiency of the same boiler was increased by more than one-half by the application of this contrivance. From the results of independent trials made by M. Gibault, at Paris, in April, 1880, it appears that while steam was got up in a portable boiler fitted with the Wery chimney in one hour 18 minutes, with the ordinary chimney the time required to get up steam was two hours two minutes.

In his remarks upon the fixed appliances, Mr. Clark says that in Livet's system of setting boilers, it is not at first sight obvious that, by the employment of expanding flues of a special shape and construction a materially better action of the furnace and boiler should be effected. It has, nevertheless, been ascertained by many instances of resetting on Mr. Livet's system, that the draught has been improved and the evaporative efficiency augmented. The tabulated results of the tests of Welsh coal show that, in the boiler at the works of Messrs. Clay, Sons, and Taylor, which is set and fitted on Mr. Livet's principle, very high evaporative efficiencies of fuel have been attained. The large capacity of the flues, it may be added,

affords exceptional facilities for inspection of the boiler. With regard to the merits of Wery's system of atmospheric chimney, Mr. Clark states that the unexpected advantage gained by its employment on the vertical boiler exhibited is certainly a study for the mechanical philosopher.

THE GOLD FIELDS OF GUAYANA. THE CENTRAL CALLAO GOLD FIELDS.

We have already drawn attention to these important mines, situated in the heart of the Caratal Gold Field of Guayana. The properties have hitherto been held (like El Callao) by a group of Guayanian merchants, and one of the mines (Los Frailes) has always been regarded as one of the most important in the district. In order to develop the Central Callao properties more rapidly, it has been decided to transfer them to an English company, but so high an opinion have the proprietors formed of their value, that they have only consented to the transfer on condition of receiving the whole of the purchase-money in shares of the new company. The properties are held under four concessions, having about 95 years to run, and comprise together about 700 acres. They are known as the Los Frailes Mine, which covers an area of 409 acres, and is adjoining to El Callao and Callao Bis on the north; the Union and El Tigre Mines on the east, the Sosa-y-Mendez Mine on the south, and the Panama Mine on the west, being, in fact, in the centre of the Callao district. The noted Callao lode, which runs north and south, traverses the property for about $\frac{1}{2}$ mile in length. Very strong outcrops of this important lode have been opened upon at two or three places, showing an excellent appearance, some of the quartz being rich in visible gold. This lode will now be developed in depth.

THE LOS FRAILES LODE.—To this vein, which runs east and west, and is considered to be the largest and one of the richest in the Caratal district, the operations have hitherto been principally confined. A main engine-shaft has been sunk about 17 fathoms from surface through a very fine lode. At the bottom of the engine-shaft the vein is 10 ft. wide, producing about 30 tons of quartz per fathom, yielding 2 ozs. of gold per ton, or 60 ozs., value 230*l.* per fathom. About 50 ft. to the east of the above is the old shaft, which has been sunk to the same depth. The lode in the bottom is 8 ft. wide, yielding 2 ozs. of gold per ton, or 48 ozs., value 184*l.* per fathom. Between the two shafts a north and south lode, supposed to be the Callao, crosses the Los Frailes vein almost at right angles. This lode is about 3 ft. wide, and produces 2 ozs. of gold per ton. The Los Frailes vein has been driven upon for a distance of about 300 ft. through a lode varying in thickness from 6 to 25 ft., and averaging throughout 2 ozs. of gold per ton. At the western fore-baste of the 17 fathom level the lode is 6 ft. wide, and yields 2 ozs. of gold per ton. The ground to the westward in front of this level rapidly rises to a height of 200 ft., consequently as the level is driven forward a very large amount of ore ground will be laid open between it and the surface. We understand it is the intention of the company to proceed at once to sink the shafts 10 fathoms deeper, and drive a new 27 fathom level east and west on the Los Frailes veins, also to drive a level at the same depth on the north and south vein. These operations will open out in a few months a mine capable of readily yielding quartz sufficient to supply a mill of 100 stamps, and in a further short period sufficient quartz for a second mill of equal dimensions.

ENGINES, MACHINERY, REDUCTION WORKS, &c.—The mine is supplied with powerful winding and pumping engines at each shaft. The mill erected comprises only 20 stamps, but this number it is proposed to considerably increase. The barracks for workmen and various buildings are very extensive and compact, and are reckoned among the best in the district. The amount expended in the erection of the machinery and buildings is stated to exceed 85,000*l.* The mine and reduction works have been well located in the centre of the Los Frailes property, which extends about 1500 ft. west and 2000 ft. east of the engine-shaft, on the Los Frailes lode, and about 2000 ft. north and 6000 ft. south of the engine-shaft, on the north and south lode. The works have hitherto been laid out in such a manner that they can be readily increased, so as to develop the mine very extensively, and it is evident from the discoveries already made that there will be an abundance of ore for the mills during the term of the concession.

THE ATALAYA GOLD MINE.—This property comprises about 70 acres, and nearly adjoins the Chile Mining Company's property on the south-west. It is well situated for easy development, as the ground rises rapidly on the eastern side, where adit levels can be driven in to intersect the lodes, at depths varying from 200 to 300 ft. from surface. Outcrops of the gold veins, of which there are several in this property, have been extensively worked on the surface by the old miners; and, as these primitive operations were carried on without the aid of machinery, the quartz being crushed by hand, and the gold washed out in the bateas, it is evident that the veins are very productive, and there is ample ground here—about $\frac{1}{2}$ mile square—for opening out an extensive mine. There is an abundance of wood on the property available for mining purposes and fuel.

The **POTRERO PROPERTY** is about 70 acres in extent, and situated about $\frac{1}{2}$ mile due east of the Callao Mine. It contains a number of large quartz lodes, but very little gold has as yet been discovered on this grant. The surface is covered with an abundance of good timber.

The **BONIFACIO PROPERTY** comprises about 140 acres, and is situated on the north side of the Yuruari River, nearly opposite the Callao and Nacupai Mines. The grant is very heavily timbered, and in this respect will prove of considerable value to the company, but the gold veins have not yet been explored.

CALLAO BIS.—Advices just received state that the lode recently intersected in this property has been driven upon for a distance of 40 ft., and averages 4 ft. in thickness. Its bearing is north-east and south-west, from which it would appear that it is the Nacupai lode, which, in the Nacupai mine, produced in the mill about 3*1/2* ozs. of gold per ton. Should this prove correct it will greatly enhance the value of the Callao Bis property, for the Nacupai vein is in point of size and richness quite equal to El Callao, whilst by continuing the sinking of the engine-shaft, the latter vein will certainly be met with at no very great depth from the present interesting point of operations. The Callao Bis Company are to be congratulated on this new discovery.

The above form together the group of properties which are now being transferred to the Central Callao Company, and having regard to their great extent and value, to the important discoveries made in the Los Frailes Mine, and to the buildings and machinery already erected, there can be little doubt but what the new company will quickly take a leading position among the established mines in the Guayana gold fields. The London offices of the company are at 44, Finsbury Pavement, E.C.

THE RIO TINTO MINES, AND THE MADRID EXHIBITION.

The Rio Tinto Mines stand forth so prominently as an instance of Spanish mineral wealth, and of British mining enterprise, that it is but reasonable to expect that they would be fairly represented at the forthcoming Madrid Exhibition, and it is gratifying to find that the directors of the Rio Tinto Company have taken the necessary steps to ensure the representation being graphic and interesting. Mr. C. N. Thwaite, the architectural and engineering modeller of Commercial-road, Peckham, has just completed a large model of the town and mines of Rio Tinto, accurately wrought to scale, and coloured to nature. The model covers a space of 9 ft. by 6 ft., and would average about 3 ft. thick, so that it is amply large enough to permit the character and extent of the workings being readily understood and appreciated. Although a copper mine, the enormous thickness and continuity of the deposit renders it more economic to work it as an immense quarry with five or six benches, upon each of which regular railways are laid for the removal of the ore. The superincumbent mountain is being entirely removed by seven other benches, on five of which locomotive traction is provided, whilst on the two upper ones, which are at too great an elevation for the convenient use of locomotives, mules only are employed. The whole of the benches, whether in the ore in the over-burden, forming one continued series of steps, the 12,000 workmen employed

their labours regularly and uninterruptedly, thus turning out the enormous quantities of mineral periodically reported in the *Mining Journal*, and extending the available mass of mineral, which really appears almost inexhaustible.

Standing behind the town of Rio Tinto, which occupies one corner of the model one sees, the several streets, the casa grande, the plaza, and the various other buildings, all of which Mr. Thwaite has modelled so accurately that it would be difficult to suggest an alteration. Beyond the town is the large gulf representing the mine, on the right hand or eastern side of which are the various buildings required for the treatment of the ore, the building which contains the machinery for generating the electricity, which supplies seven arc lamps by which the works are illuminated at night, that which contains the carriage provided for the King upon the occasion of his visit to the mines, and so on. Even the railways, which were then fixed on the edge of one of the benches that the royal party might safely occupy an otherwise dangerous position to obtain the best general view of the mine, is carefully shown, and the locomotives, water conduit, electric lamp poles, and other minute details which a less experienced modeller would scarcely have noticed, are accurately represented. Looking towards the east from the back of the mountains, the summit of which is about 300 ft. perpendicular above the tunnel level, an excellent view is also obtained, the bridge connecting the town with the works having all the solid appearance of a finished piece of ordinary engineering. The model altogether reflects the highest credit upon Mr. Thwaite, and if brought back to England after the Exhibition, will be invaluable for giving the shareholders a correct idea of their really marvellous property.

ASBESTOS, AND ITS INDUSTRIAL APPLICATIONS.

The manufacturers of the United Asbestos Company have several times been prominently referred to in the *Mining Journal*, and as they have now issued a new illustrated catalogue an opportunity is afforded of again noticing some of the more important articles. As the company has now established extensive mills near London they have greatly increased their facilities for manufacturing economically, since they have not only the exclusive use of water-power, but have adopted novel and specially designed machinery which enables them to manufacture the best quality at the lowest possible price. Asbestos has of late become an important article of commerce, and its uses are daily extending. This is owing to the fact that the long, tough, fibrous nature of the mineral they employ—Italian asbestos—is capable of being worked into almost any required form or state by the aid of improved machinery. The extraordinary results obtained by the use of the company's asbestos fire-proof paint was noticed in the *Journal* some six months since, when it was submitted to a series of the most severe tests that could be devised, and the company are now able to announce that the success of this branch of their business has far exceeded their most sanguine anticipations, and they are now receiving enquiries and orders for their paints from all parts of the world. This success can only be attributed to the thoroughly genuine character of the paint, as testified by the numerous public demonstrations they have made of its great fire-resisting qualities before the Lord Mayor of London, the Metropolitan Board of Works, the Lord Provost of Glasgow, the mayors, corporations, and fire brigades of the various provincial cities.

But probably the greatest triumph which the company has achieved in the industrial application of asbestos is the new patent woven steam packing which they have introduced, after experiments extending over a considerable period. For a considerable time Italian asbestos has been recognised as possessing natural qualities far superior to any other material for making a high class, durable, and really economical packing for glands. Owing, however, to the difficulties hitherto experienced in working this mineral fibre into a clean, pure thread or yarn, no packing that has as yet been before the public has proved quite satisfactory. These difficulties have now been altogether removed, and, after a long series of experiments and considerable expenditure of capital, special machinery has been designed and patented by the company, by which they are enabled to offer, at a very moderate price, a packing which can be recommended with the fullest confidence, and which is already being received with great favour by large users of steam-power. The principal advantages claimed for this packing are, that it is made from the best selected strong Italian asbestos fibre; that it is guaranteed to be thoroughly clean, and absolutely free from soapstone or other foreign matter; that it is firm, but sufficiently elastic to render it specially suitable for locomotives and all other engines worked at high speed and high pressure; that there is not the slightest reason to apprehend injury to the rods by its use; on the contrary, it will keep them bright and clean so long as it remains in the glands; that its remarkable durability renders it the most economical packing in existence. Packing manufactured from the same material, but of an inferior make, has been in constant wear in the French navy for 18 months without the gland having to be disturbed, and similar instances of its lasting qualities frequently come to notice; that when used for marine engines it will not char, and the dangerous necessity for stopping at sea to pack the glands is obviated by its use; and that it is to a great extent self-lubricating, and works well with ordinary mineral cylinder oil. As this packing is composed of fine spun Italian asbestos thread it can readily be supplied of any required size from $\frac{1}{8}$ in. to $2\frac{1}{2}$ in. diameter, and in every case in which it has been used it seems to have given entire satisfaction.

THE LORD ADVOCATE AND MINERS' GRIEVANCES.—The secretary of the Fife and Clackmannan Miners' Association has received from the Lord Advocate a letter, in which his lordship deals with the question of weighing coal, which has been a source of dispute between coalmasters and coalminers in Scotland for a long time. He gives it as his opinion that "It is not illegal for the employers to pay the men at a certain rate on quantities of 22*1/2* and 24 cwt., these quantities being multiples or parts of imperial measures. He also considers that deductions for foreign material cannot be fixed by the employees alone, but by agreement." Much importance will be attached to the views thus given by his lordship.

COAL AGENTS AND CONSUMERS—REMARKABLE COUNTY COURT CASE.—At the Bloomsbury County Court, on Feb. 23, G. J. Eveson, of Birmingham, brought an action against F. A. New, of the Coal Exchange, London, for the recovery of 8*l.* 17*s.*, money paid

gives a similar reply. Mr. Whitley, M.P., remarks that the point must be considered in connection with the proposal for county boards, understood now to be under the consideration of the Government. Mr. Whitley, however, has no hesitation in saying that the question of local taxation demands immediate attention, in view of increasing expenditure.

THE MINERAL WEALTH OF THE TRANSVAAL.

The introduction of the mineral wealth of the Transvaal to the notice of British capitalists being one of the primary objects of the South African Syndicate, those interested in that enterprise are not unnaturally desirous that such adverse criticism as has from time to time appeared from the Kimberley correspondent of the *Minning Journal* should be met and answered, especially as the leading members of the Syndicate express their confidence that the Transvaal is, beyond comparison, the richest mineral field to be found in either hemisphere. Whether this confidence will be justified by results, of course, cannot be determined until the mines are in operation; but it must be acknowledged that the chairman of the Syndicate—Colonel MacMurdo, an American officer, possessing that ready communicativeness and marvellous facility of description for which his countrymen are celebrated—produces documentary evidence in the shape of beautifully coloured sketches, plans, and sections, and attractive mineral specimens of the gossany quartz character, so much admired by miners, that should satisfy all who know his integrity that it is an immense field for enterprise which he is about to bring to their notice. The development of the Transvaal as a mining region will be equally interesting, from a commercial and from a scientific point of view, since from the physical conditions of the country it is about one of the last in creation from which the English, American, or Australian miner would expect favourable results without such conclusive preliminary evidence as the gallant colonel brings forward, and which will presently be referred to more in detail.

Mineral regions and mineral being the common object of the miner's search it is these which most interest him, usually exist in barren and mountainous districts—the ever-varying elevation of the country facilitating his mining operations, and the copious rivers and rapid mountain torrents affording him the necessary water-power and the means of making his mineral marketable by dressing and concentration. Instead of this the Transvaal is an almost level plain, the koppies which break the continuity of the flatness being mere hillocks, which would not disfigure a gentleman's park. The great rivers and mountain torrents of the Transvaal are conspicuous only by their utter absence, the water-courses which pass by the name of rivers—the Vaal, the Olifant, and the rest—being mere puddles, inasmuch as they seldom exceed 3 ft. or 4 ft. in depth, although they are not unfrequently of considerable width; yet these rivers represent almost the only water available for the miner's use. In the matter of barrenness the Transvaal in some respects comes up to the miner's ideal; but the barrenness is due, not to the mountainous character of the region, but to the circumstance that in the vast majority of localities it is impracticable to obtain potable water even by well-sinking. In this matter Nature has been particularly cruel to the Transvaal; in fact, considering the great mining country which Col. MacMurdo, as will presently be seen, proves the Transvaal to be, one would almost suppose that Nature had entered into a commercial partnership with Krom, or some other inventor of pneumatic ore-dressing machinery, relying upon the development of the mines of the Transvaal for yielding her suitable royalties as a patentee.

But the mines of the Transvaal are, indeed, worthy of the British capitalist's attention, especially when it is considered that, principally owing to the absence of water already mentioned, the average market value of land in the Transvaal (excluding, of course, those townships within which mining operations would not be permissible) does not exceed one shilling per acre, or 32/- per square mile—a price upon which mines no richer than those in India might yield dividends to the shareholders. The Transvaal Mines must not, however, be compared to those of India, for Colonel MacMurdo has series of sketches and plans which have scarcely been equalled for colour and finish since the late Prof. Ansted exhibited his diagrams of Messrs. Arrieta's great mines of San Fernando de Cuba. Nor is this all, for Colonel MacMurdo states that there are in the Transvaal old workings as extensive as those at present existing on the great Comstock lode in America, and it would, of course, be absurd to suppose that works of this magnitude would have been undertaken except in following rich mineral veins. The Colonel does not pretend to determine when these operations were carried on, but suggests that it may have been in the time of Solomon or earlier; and, assuming his surmise to be correct, there would be great inducement to continue them, since the diagrams show that the ancient Israelitish miners of the Transvaal conducted their work in a thoroughly minerlike manner, sunk perpendicular shafts according to the last recommendation of the Cornish Mining Institute, and made such admirably true horizontal drivages that the missing link seems to have been found which connects the Israelites and Phoenicians with the Cornish diallers, and these with the well-known miners' instrument makers of Derby.

The ores which Colonel MacMurdo has in London are as satisfactory as the shafts and levels shown in the diagrams; the concentrations show pure and unrolled gold which would gladden any miners' heart, and even stone which contains no visible gold has been ascertained by Messrs. Johnson and Matthey to yield gold in quantities which, obtained upon a sufficiently large scale, would yield very handsome profits to those engaged in working it. The South African Syndicate evidently possess ample capacity for business, and as in their Transvaal mining operations they claim to have a second Comstock to commence upon, British capitalists will assuredly give them the financial support they deserve.

SCHWAB'S GULLY DIAMOND MINING COMPANY.

The report for the quarter ended December, presented at the meeting at Kimberley, on Jan. 16, was again satisfactory, the results showing continued steady progress in the face of more than ordinary difficulties and drawbacks experienced during the said period. Scarcity of water did at one time considerably interfere with the washing operations; but with the present increased and steady supply from the wells, and in view of the fact that the water from the Kimberley Waterworks Company will shortly be available, if at all required, no further difficulty on that head need be apprehended. The greatly increased stock of blue ground has necessitated additional floor-room, the acquisition of which causing some anxiety to the directors and manager, owing to the fact that all depositing sites adjoining the company's property are already occupied; it was, therefore, necessary to secure floors some distance away, which, although rather inconvenient and entailing additional expenditure for carting, was the only means of overcoming the difficulty.

These drawbacks are, however, insignificant compared with the falling off in the revenue caused by the great depreciation of diamonds, which amounts to fully 30 per cent. on the prices ruling in the previous quarter. But for this far better results could have been achieved. On the other hand, the directors have commenced reducing the high rates of wages paid to native labourers until lately, and although some inconvenience has been felt by the subsequent scarcity of labour the directors will continue, in conjunction with other companies to persevere in this course until a more reasonable level of wages is reached, and one more in accordance with the present state of the times. Produce, too, has ruled very high, but the increased expenditure under this head is partly counterbalanced by the reduced price paid for explosives. The additions to machinery, plant, and live stock in the last quarter, including new Kaffir barracks, two pumping gears, horses, &c., amount to 562/- 18s. 4d., and that some exceptional expenditure has been incurred in the shape of the bonus voted at the last quarterly general meeting of shareholders.

The work done during the quarter was—Blue ground hauled, 20,842 loads; reef and stones hauled, 941: total number of loads hauled in 70 working days, 21,783 loads. Blue ground on floors on Sept. 30, 1882, 18,755 loads; ditto hauled during quarter, 20,842: total, 39,597 loads. Blue ground washed in 74 working days, 19,114

loads. Quantity of blue ground on floors on Dec. 30, 20,483 loads. The quantity of diamonds found was 16,731 carats, of the value of 18,640/- 0s. 6d. The balance brought forward amounts to the sum of 8104/- 6s. 11d., which the directors recommend to be disposed of as follows:—The amount of 710/- 4s. 4d., being 5 per cent. on the total net profits for the last half-year (14,204/- 6s. 11d.), to be placed to the general reserve fund in terms of a resolution, passed at the last quarterly general meeting of shareholders held on Oct. 24 last. A dividend of 4/- per cent. to be payable to the shareholders on the 20th inst., absorbing 5490/-, thus leaving a balance of 1904/- 2s. 7d. to be carried forward. Bearing in mind the adverse circumstances alluded to, and the fact that the dividend is derived solely from the profits of the last two months (the previous dividend, 5 per cent., having been payable on Nov. 1 last), the directors have no doubt that the results will give entire satisfaction.

The report was unanimously adopted, and the payment of the dividend sanctioned. Messrs. Heckrath, Ling, and Robinson, who retired by rotation, were re-elected directors; and 77. 7s. each were voted to the auditors for the last quarter's audit. The question of opening an agency in London was deferred until the next meeting.

THE MINERAL WEALTH OF COLOMBIA—THE ORGANOS AND ORITA MINE.

For some time past the mines in the United States of Colombia have been rapidly increasing in prosperity, and now promise to be lastingly remunerative to those engaged in their development. Today the Tolima Company has declared its usual quarterly dividend of 5s. per share, being at the rate of 20 per cent. per annum, and from the subjoined highly-satisfactory report of Mr. A. E. Oakes it appears that the neighbouring properties of Organos and Orita will prove at least as remunerative, as the companies' properties appear to be equally rich, whilst the much smaller capital embarked will necessarily permit of the dividends declared being upon a vastly higher percentage annually. Mr. Oakes' report is at once interesting and exhaustive, and cannot be too carefully read whether by present or intending shareholders. It is subjoined:—

Malpaso, Dec. 19.—The Orita Mines consist of very extensive alluvial deposits of auriferous gravel. The gold dust is so evenly distributed throughout the whole of this gravel that there is little fear of running short of it; indeed, when the conditions under which a gravel mine is being worked are known, it may be predicted with very fair accuracy what each month's run is likely to produce. The mines are to be worked by the hydraulic process, the qualifications for which I place in the following order:—1st, a good outlet of steep declivities down which to dispose of all tailings and refuse from the mine; 2nd, an ample supply of water to carry off the gravel and all the boulders found in it; and 3rd, gold. Strange though it may seem, the latter is of little value without the former. Orita is in every way favourably situated for hydraulic mining. Its outlet, though not first-rate, is by no means a bad one, and its short comings are amply made up for by its abundant water supply. The River Medina, which flows within three miles of where it is intended to begin the operations, contains probably more water than was ever laid out to any single mine, and it is situated at such an elevation as will afford as much pressure or fall into the mine as could possibly be desired, and if the whole of the river be brought into the mine it will make its own outlet. There is nothing to prevent the whole of the water being brought in, either by canal or pipes, and upon the way in which this is done the success or failure of the mine will chiefly depend. Gold appears to be distributed throughout the gravel to the value of about 12 or 13 cents to every cubic yard, which is undoubtedly rich, and is of the same quality as that of the two adjoining mines, which will enable me further on to draw comparisons.

Another indispensable item in all hydraulic mines is timber, and this of excellent quality abounds all over the Orita estate (about 5760 acres), and will last almost an indefinite number of years. It is, therefore, my belief that all that is required to make the mine a success is to bring in the whole of the Medina, which contains certainly not less than 3500 million inches of water. (Note.—A miners' inch is the amount of water which, under certain conditions, will flow through an inch hole in 24 hours.) This may be taken to be equal to a discharge of 2320 cubic feet, or 13,857 gallons per day of 24 hours, and thus it may be seen that the Medina is capable of supplying at least 8,639,500 gallons per day.) I will now proceed to compare the actual results obtained at the neighbouring mine of Malpaso with those which may be expected at Orita. For the last nine months I have been connected with the Malpaso Mine, and the following particulars will show the returns being obtained. In an ordinary year there are about 294 days on which the water is running in the mine, and about 71 days on which the water is wholly or partially turned off. These 71 days are employed in repairing the ditch, putting new sluices in the mine, cleaning up the gold, &c. On each of the 294 working days the Malpaso ditch delivers in the mine 500 lbs. (equal to 1,234,214 gallons of water), and the gross produce of gold cleaned up during the past nine months has been 52971. 12s., equal to 69632. 9s. for an entire year, or about 5800 per month. The working expenses for the same nine months have been 23861. equal to 3181. 6s. for a year, or about 2651. per month. This leaves a clear profit of 3782. 3s. on the year, which will be found to average about 3157. per month.

The Malpaso Mine may fairly be said to be running at a profit of 3782. per annum, so if its capital had been the same as that of Orita (20,000/-) it would now be in a position to pay a dividend of about 18 per cent., and this with the very small amount of water available, 500 in. Turning to Orita we have now to consider what may be expected from the enormous supply of water furnished by the Medina river. I will endeavour to show by actual facts that by increasing the water supply the produce of gold will be increased in far greater proportion. A recognised authority on hydraulic mining is the North Bloomfield Mine, in California. This mine possesses, I believe, the largest motor or hydraulic machine in the world. It has a nozzle 10 in. in diameter, through which it throws a stream of 3000 in. of water. North Bloomfield began on a small scale like Malpaso, and has gradually increased its water, and in a far greater proportion its gross produce of bullion has increased. I have before me the results of eight years' work, and from them I have made numerous calculations, from which I will select those most closely bearing on the present question (to give the whole would occupy too much space). During the four years, 1870 to 1874, this mine used 710,987 in. of water, which gives an average of 177,747 in. in each year. Assuming, as in the case of Malpaso, that there are 294 working days in each year this would give a daily supply of about 600 in. of water. The produce of gold with this quantity of water was 13.6 cents per in.

In the year 1874-5 rather more than double the quantity of water was used, equal to about 1300 in. for each working day (586,972 in the year), and with this the yield of gold was found to be 19.2 cents to each inch of water. The following year—1875-6—the water was again greatly increased, 700,000 in. being used during the year, equal to about 2380 in. per working day, and the gold produced averaged 27.5 cents per inch of water. Now let us compare this year with one of the first four—177,747 in. of water at 13.6 cents gives \$24,175; 700,000 in. of water at 27.5 cents gives \$192,735, or, speaking in round numbers, with four times this supply of water we get eight times the quantity of gold. Again, in the year 1877-8 the water was increased to about 2700 in., and this produced 31 cents per inch. Applying the foregoing to the case in question it goes to show that if the Malpaso, with 500 in. of water, can give a gross return of 69632. yearly, Orita, if it only gets four times the water—say 2000 in.—ought to return eight times the gold—55,704. It may interest some to give a comparison of the actual quality of the gravel at North Bloomfield and that of Malpaso. During the four years 1870-4 the gross product of North Bloomfield was 19,340/-, which averages 403/- per month with 6.0 in. of water; while Malpaso, with only 500 in., has averaged 580/- per month during the time I have been connected with it; therefore there is every reason to believe that when Orita has laid on as much water as North Bloomfield it will give as good a result. The latter mine in 1877-8, with about 2700 in. of water, produced 62,255/- Having arrived at the gross produce the next thing is to consider the working expenses and probable profit the necessary amount of labour diminished as the water supply increases; but, on the other hand, a mine worked on a large scale requires more timber and more expensive sluices than a less pretentious one. The following should be a very fair estimate of what the working cost of Orita should be:—

Taking the gross produce to be only 4642/- monthly—Royalty to owners, 663/-; manager (say), 85/-; foreman and native labour (say), 200/-; timber, charcoal, &c., 75/-; contingencies (say), 27/-; manager's commission, 5 per cent. 150/- = 1230/-—Balance for dividends, 3412/- = 4642/- Therefore within the first half-year after the mine commences work the whole of the capital ought to be returned. It must be borne in mind that the foregoing calculations are based on the assumption that the whole amount of water mentioned in the prospectus is to be delivered at the mine in a durable pipe or canal.—A. E. OAKES, Superintendent.

This is hardly fair either to the Malpaso or the Orita. The Malpaso can practically only be said to have lately been efficiently opened up, and the profit of the last five months may be taken as about 2500/- That Mr. Oakes bases his calculation upon the whole term of his office as manager—nine months—therefore shows his care and desire not to exaggerate.

MOUNTS BAY CONSOLS.—The parcel of tin, announced as ready for sale last week, has been sold, and it has fetched as usual the highest price of any in the district. A good parcel of tin is ready for sale from Sydney Cove, and the machinery is described as most efficient and capable of treating a large quantity of ore-stuff. It is intended to make regular monthly sales henceforth, and it is believed that the numerous new points which are continually being opened up will admit of large and increasing monthly sales. The fine weather now prevailing will no doubt materially assist the surface operations.

CATHEDRAL CONSOLS.—The 74 east improves as driven on from the shaft. The end is now worth 1 ton of copper ore to the fathom. As it advances it will come under the ore ground seen in the level above, and shall yield good ground for stoning.

WHEEL CASTLE.—Allotment letters were posted last Monday, and it would appear that the directors do not intend to lose time, for already the local officials have been appointed, machinery purchased, and instructions sent for its immediate erection. From present appearances the interest of 10 per cent., guaranteed for six months, would appear to be more than sufficient to cover the time required to erect machinery and make paying returns.

FOREIGN MINES.

ALMADA AND TIRITO CONSOLIDATED SILVER.—H. Clemes, Jan. 27: The developments at the workings, west of main lode, Trito, i.e., in vicinity of north slide have continued favourable; a large quantity of good green ore has been obtained this week from this place. The minor explorations in Virgen are not looking so well as when last reported. We shall continue the work for a short time, but the indications downwards are not encouraging. Mina Grande sections of main stope please find enclosed. It will be seen that there is plenty of room for a good ore block in San Juan; the present back is very dredgy, but we hope to find it more mineralised higher up. The vague outline (in purple) shows the situation of the lately discovered pillars; these are surrounded on all sides by atite, and no exact survey is practicable. This sketch will give you a clear idea of what we are doing in this part of the property—working in a whole ground at San Juan, of very low grade, and in pillars of good ore at the higher point, in old workings. The western branch is practically exhausted; it fell in quality, beginning about June, and had to be worked with great speed to compensate its small degree of mineralisation. It did not provide more than one fourth of the ore which, in view of the rise that went through it, we expected from it.

—Telegram from Mr. Clemes, Feb. 26: Rock-drills running well. About to resume remittance.

ANTIOQUIA.—Feb. 28: The following is the statement of profit and loss for the month of December, 1882: 65 tons of mineral produced 85 ozs. of gold; 61 tons of atite produced 7 ozs. of gold; total, 92 ozs. Estimated value, including exchange, 235/-; cost at the mines at Medellin and in London, 193. 13s.; profit, 95. 7s. In addition to the cost of 193. 13s., the sum of 45. 16s. has been spent on capital account.

BLEIBERG.—W. T. Glasson, Feb. 27: The lode in the end of the 10 metre level south east is a little smaller than when last reported; it is now 3 ft. wide, but very good for lead. We are obliged to suspend the sinking of No 2 mine owing to an increase of water, but hope to resume again in a few days, as it will be drained by the shaft.

CALLAO BIS.—Manager, Jan. 10, writes that since his return, and the lode recently cut in the shaft having been opened up, he is of opinion that the direction of the lode points to the conclusion that it is more likely to be the Pinta delta Costa or Corina lode (both well known rich lodes) than the El Callao; and he believes that the El Callao vein will be met with either between No 3 and No. 1 shaft a little to the west of the west of No. 3, as the lode dips west at an average angle of 45°. Drifts are now being extended in these directions as quickly as possible.

CALIFORNIA GOLD.—Mr. Alfred Rickard, manager at the mine, in his report for the week ending Jan. 27 states:—The output from the stopes of the 1200 ft. level, east of shaft, has somewhat fallen off, but the ore vein is 2 ft. wide, yielding 5 tons of fair grade milling ore per fathom. The 1300 ft. level stopes west are putting out 5 tons of high grade ore per fathom; the average of the week's milling is 17.20 per ton. The 1200 ft. level west is in 529 ft., and is connected with the 1100 east from the Hidden Treasure, and facilities gained for easy communication between the two mines. The richer pay in the 1200 ft. level stopes west is practically exhausted. The 1100 ft. level west is in 406 ft.; the lode is 2 ft. wide, yielding 5 tons of ore per fathom, and the output from the stopes is about the same amount. Our tests from the 700 and 500 level stopes indicate constancy in the value of the ore at these places. The milling power from the California mill alone is not sufficient to handle the output from every point in operation, and an accumulation of mineral has taken place, and work is not pushed on actively at these points. The results obtained on the ore from the 1300 are of a very satisfactory nature, and the general average is the highest known for the past five months. The intense cold continues, and it is difficult to get the smelting ore to the sampling works, and no concentrates can be forwarded to the smelting establishment at present, hence no returns. The usual telegram from the mine reporting the week's mill run and proceeds has not yet come to hand.

CANADIAN COPPER AND SILVER.—F. Bennet's, Feb. 15: Hartford Mine: No. 5 Shaft: The leading part of the vein in the 70 east has been from 16 to 18 in. wide of copper ore. In the rise in the back of the 50 east we have just struck the vein above the intersection of the cross-course, but have not as yet ascertained its size. At No. 1 shaft the vein is in the 35 west; the leading part of the vein is about 3 ft. wide, a little slate being mixed with the ore. The stopes throughout the mine are looking well. At St. Francis Mine the vein in the 30, south of main shaft, is about 2 ft. wide, composed principally of quartz and slate. The vein in the 30, north of main shaft, is from 18 to 20 in. wide, composed principally of decomposed slate containing a little copper ore. The Capeton smelting works are running well.

COLOMBIAN HYDRAULIC.—A. E. Oakes, Jan. 17: Malpaso Mine: Run No. 31: This run at the upper mine from Dec. 15, 1882, to Jan. 5, 1883, during which time washing was carried on for 412 hours, has resulted in a return of \$9512.33 from the sluice, which, added to \$441.22 bought gold, has produced a bar worth \$956.45, the total cost of the mine for the month being \$1955.55 shows a loss of \$99.10. This is lost up in the light of an ordinary run, would be most unsatisfactory, but, as I explained last month, it was absolutely necessary to excavate and put in sluices on the north or paying side of the mine; so rather than let the machine lie idle I turned the water on the south side, which I knew to be poor, but I was anxious to get what little I could towards paying expenses, and this was my only alternative. As soon as the sluices on the north side were ready I cut short run No. 91, made a quick clean up, and on the same day Jan. 5—commenced run No. 92. This you will see that only 20 days were devoted to the past run, whereas the expenses of the entire month, 31 days, are put against it, and the month happened to include five pay days. I have every reason to hope that the run now going will in a great measure make up for the present loss, for we are not only washing on far richer gravel, but have gained several days, which, with ordinary luck, should give us an unusually long run. We have had much to contend with during the past short run, for there have been accidents to the pipe and ditch, and many feast days, which delayed the laying of the sluices.

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PIERREFITTE.—Manager, Feb. 26: The stopes in the back of the level running south-east from the cross-course have slightly fallen off in value during the past week, but I am pleased to say the lode is improved in value in the level going north-west, especially in the end. On the whole, there is very little change since my last report. There has been 250 tons of ore broken, but only 130 tons has been sent to the floors, owing to bad weather during two days, when the cable did not work. We have dressed, however, 54 tons of lead this week. The machinery is working satisfactorily. Our supply of water is falling off, and in consequence we are only able to work one crusher at a time.

PORTE PHILLIP AND COLONIAL GOLD.—Jan. 16: Total quartz crushed for the month ending Dec. 27, 1934 tons. Total gold obtained, 430 ozs. 12 dwt.; average per ton, 4 dwt., 11 grs. Receipts, including 5324, 4s. 4d. obtained from tributaries. Payments, including firewood, 13384, 5s. 5d.; loss, 1634, 1s. 3d.

RARA FORTUNA.—N. M. Maxwell, Monthly Report for December: Mina Rara Fortuna: The sinking of the main engine-shaft has been suspended until the cross-cut west to cut the lode is far enough in to continue the sinking, as the hurry to open up our ground is so great. I have concentrated all our force upon this cross-cut, which is now in 4 metres 10 centimetres. The No. 1 main level has now been holed through, and we are now driving onward to the 3d de Febrero. The communication of this level has drained the winze No. 2 water, and we have been thus enabled to dispense with many men hauling water and stores. A little further south we shall commence another winze below the No. 1, and, when deep enough, drive to meet the No. 2 level coming south. The No. 1 has improved, and is now worth 1½ ton per fathom; set to drive at \$22 per metre. We have also started to stop in the back of the level from the winze. On both sides the branch, though small, is good, and will leave a fair profit on the breaking and returning. The shallow level south has been driven during the month 4 metres 26 centimetres, and looks like making an early improvement; set to drive at \$10. The stopes in the back of this level has improved, and is now producing some good paying work in blends and ore.

FRONTINO AND BOLIVIA.—The following is the statement of profit and loss for the month ending December, 1882:—2438 tons from general mining produced 2322 ozs., average 19½ dwt. per ton (weight reckoned as before to 27 dwt. to the ton); gold bought, 177 ozs.; cost at the mines at Medellin and in London, 4939, 13s.; monthly allowance for freight, commission on gold sales, and sundry fluctuating outlays not immediately ascertainable, 2507; paid for gold bought of tributaries, 3351, 3s. = 5524, 16s. profit, 9831, 4s. In addition to the cost of 4939, 13s., the sum of 369, 12s. has been spent out of the new capital recently provided, and has been debited to capital account. Mr. Franklin White fully explains the causes for the smaller remittance of gold, and the shareholders' attention is requested to his remarks on the improvement to be looked for in several of the mines. In his mid-monthly report Mr. F. White reports:—"The produce from the mines, therefore, has not improved on the average of last month, but cost is proportionately low."

HENRIETT.—Manager, Feb. 6: I regret to inform you that the mine was worked at a loss of \$1000 during January. This deficit was caused by the lowness of the grade of ore in, or about, cross-cut No. 2, from which place the bulk of the ore was produced for the past month, and also by the great cost incurred in keeping the water down. Main incline has been advanced 14 ft., and a connection is now made with No. 3 shaft. In the end there appears to be a great improvement in the grade of ore, a fair sample of several pounds weight taken from this place, assaying 129 ozs. silver and 22 per cent. lead. The vein is about 12 in. wide, and has taken a sudden dip downwards. The galena taken from the same place assayed 179 ozs. silver and 67 per cent. lead. It is about 3 in. wide, and in the centre of the vein. No. 14, south of main incline, has been run 17 ft. through a barren contract. No. 15, north of cross-cut 1, has been driven 25 ft. through a lode about 2 ft. wide, assaying from 10 to 15 ozs. silver and 30 per cent. lead. In the present end the vein is 2 ft. wide, and of rather better grade. A winze has been sunk on the dip of the vein at beginning of No. 15 about 10 ft. deep, in which the vein looks well. Lent drift has been run 12 ft. The end is barren, and the drift suspended. The stopes north and south of cross-cut 2 show a body of ore from 2 to 4 ft. wide; but it is low grade in silver. Stope No. 15, east of 14 drift, shows 2½ ft. of ore running about 20 A.G. and 25 per cent. P.B. In the stope there is a solid vein of galena about 3 in. which assays 79 A.G. and 66 per cent. P.B. It is undoubtedly the same streak we have in the incline. As soon as the bottom of No. 3 shaft is securely timbered we shall start No. 15 drift from main incline, and hoist the waste through No. 3 shaft, while the incline will be continued on its present course. The water is still very heavy, but by keeping the pumps constantly at work we can make fair progress in the incline.

HOVER HILL.—Resident Engineer, Feb. 13: My last letter to you is dated Feb. 2. Since then the pump has been put in and started up; we shall now be able to make better progress in sinking Hawkins' shaft. This shaft is now down 124 ft., and we purpose drifting at 135 ft., or 50 ft. below the tunnel. Some good ore continues to be got in the tunnel stope. The Gaillmore shaft is down 157 ft., and there is no change to note. I have put the men to drive further to the south-east in the 130, at a point under the old Briols' shaft, which I wish to have proved. As I wrote you in my last, the mill engineers were wanted to put in the pump, so the mill was not run last week. We started up 10 stamps yesterday. We were rather short-handed at the mine for a few days after the accident. I wrote you of, but now are filled up again, and are only wanting one miner. I heard from Messrs. Latree and Hart a few days ago that there is a fresh petition for winding up the company, and am writing them by this mail expressing my strong opinion that the present would be an exceedingly unfortunate time to shut down, seeing that we have just got into ore.

ISABELLE GOLD AND SILVER.—The Manager, Feb. 5: Our battery sample on Saturday was \$41.80 silver, and \$5 in gold, and 9 per cent. copper. The bullion returns from Carson Mint are not yet to hand. We have 6 tons of copper on hand worth \$1200, but do not ship to New York until we have a carload (10 tons), which we ought to make up in eight or ten days. The mill and furnaces are doing excellent work.—Foreman's Report: This week the shaftmen have been working in the stopes down in the level below the tunnel taking out ore—six men in the day and four men at night. The ore bodies are looking as well as they did when I reported last week. East drift is now in 107 ft. In the stopes above the tunnel two men have been working taking out ore which looks very well.

KIMBERLEY NORTH BLOCK DIAMOND.—Feb. 23: The directors announce that they have received advice by cable from the manager:—Blue ground hauled, 3199 loads; diamonds shipped (estimated value), 9000. Including the above figures, the total since July 1, 1882, are as follows:—Blue ground hauled, 22,845 loads; diamonds shipped, over 37,000. Of above 22,845 loads of blue ground hauled, there remain on the floor not yet washed, about 3000 loads.

KOHINOOR AND DONALDSON CONSOLIDATED.—Mr. Alfred Rickard, in his report on the Donaldson Mine for the week ending February 3 states:—The quality of the mineral is fully maintained in the No. 2 level stope, winze, and No. 3 rise. Connection between these workings has been effected in a strong lode of fair grade mineral, which will be forthwith taken down and sampled. A strong force of men are now engaged in establishing a chute for conveying minerals through this winze from the upper levels to the ore bins at the shaft. During the coming week arrangements will be completed for handling the ore, and stopping on a large scale can now be put into operation. The ore body in the No. 3 level is remarkably strong and solid. There is every indication of its making right up to No. 2. The drift has run almost continuously in ore for 190 ft., with a fine lode still in the end of drift. There being 170 ft. between this level and No. 2, the extent of stopping ground blocked out by the above-mentioned workings is very considerable. Respecting the Champion Mine Mr. Rickard says:—"The shaft is timbered and finished down to 390 ft., and considerable work has been done between this point and the 540. Some loose and scaly ground has hampered progress of the timbermen; but we expect to complete the shaft this month. The 200 level east has been connected with the whin-shaft, whereby good ventilation is established throughout the mine. The lode is small, but prospects are good in this direction. The 200 level rise is up 17 ft. in a strong body of mineral, yielding from 5 to 6 tons of fair grade mill ore per fathom, also a little smelting ore. This ore body will pay very well when transportation can be made with the wire tramway.

—Resident Director, Feb. 7: We have the bids all in for the last shipment of 37 tons. The total shipment averages \$61 per ton net. The average of Gilpin County ore is \$45 per ton. The frost, which he described as of unparalleled severity, stopped hauling by road from the mines, and having occurred before the completion of the wire rope ways, but little of the ore could hitherto be treated.

—Telegram, Feb. 23: Champion shaft completed; fixing machinery for sinking. Opening rich body of ore in bottom of the mine. Some thousands tons of low grade awaiting tramway. The directors have also been further advised by cable that the measured reserves in the Donaldson mine now amount to 15,000 tons.

LAKE SUPERIOR NATIVE COPPER.—Capt. Williams, Jan. 31: You will see by my report of Jan. 15 that we came on a branch or leader of rich yellow sulphide of copper on the footwall of this lode (No. 1 level south) about 9 in. wide; this ore, although not so good as the copper glance, will yield at least 30 per cent. of copper, and will pay very well for opening up. The point at which we have this ore being about mid-way between the two shafts, and being much richer towards the bottom of the level that towards the back, I am now preparing to sink a winze so as to prove the ore gone down, and to open up the ground for stopping. The following is the amount of work done underground during the past month:—No. 1 shaft, on the course of the lode, sunk 28 ft. 10 in.; No. 3 shaft, on the course of the lode, sunk 10 in. No. 1 level south, on the course of the lode, advanced 38 ft. 7 in.; No. 1 level south, on the course of the lode, advanced 56 ft. 2 in. The lode in No. 1 shaft and No. 1 level north continues as good as ever; all the stuff from these two points being very rich in native copper.

LYNNORE GOLD.—Simeon R. Tonkin, Feb. 5: Ferguson's shaft (present depth 107 ft.) is producing a considerable quantity of quartz, but the ground is so much disturbed at this point that I am not prepared just now to state whether it is a lode or not; however, the quartz that we are getting from the bottom of the sinking is of a promising nature, and will probably improve in quality when we get into more settled ground. We got on moderately well in deepening Taylor's shaft (present depth, 174 ft.) during the past week. The ground in the bottom of the shaft is of a congenital character, and the branch of quartz formerly referred to is about 10 in. wide.

—New Emma.—George Cullins, February 5: The shaft is now 122 feet in depth, having made but 4 ft. since my letter of the 29th ult., which is accounted for by the very severe snowstorms during the past week, causing several snow-slides.

NERBUDDA COAL AND IRON.—Telegram from manager, dated March 2: Coal has been reached in the new shaft at the Helen Pit.

NUJDYDROOG.—B. D. Plummer, Feb. 6: Stamps: These work very well, and the stuff we are crushing is of much the same character and richness as the ore from which we got the last bar of gold.—Mining Operations: Maharajah Reef: Taylor's shaft: The lode in the shaft under the 95 is 2½ ft. wide; there is a rib of quartz coming in showing specks of gold. We are encouraged to hope that a better lode will soon come in the bottom. The dip of the gold pipe in the old workings must come under the shaft at no great distance down, then we may fairly calculate on getting a better lode. There is a large flow of water, and it would be hardly possible for the old workers to cope with this and other difficulties in such deep workings unless they had gold to stimulate and encourage them.—The Eastern Vein: McTaggart's shaft: The winze below the 70 is down 136 ft. 6 in.; altogether from surface it is down 136 ft. 6 in.; the lode has been generally pretty wide, and we have always obtained a little gold. On account of the influx of water and the depth we shall not be able to sink this winze much deeper, and then to carry out the trials in depth we shall require to sink down McTaggart's engine-shaft and drive to explore the lode at a deeper point. From Taylor's shaft, Maharajah reef, to the new shaft is a distance of 1733 ft. On the run of the reef we have explored this distance at places bearing in depth from 95 to 56 ft.; the lode shows promise, and at places we have procured gold, but if ever we are to get remunerative quantities we must go deeper down. To carry on deep mining in all our workings would be very expensive, and perhaps the better plan will be to select two of the most promising places for deep sinking; one of these must be on the Maharajah reef and the other, McTaggart's shaft, on the eastern reef. In addition to sinking we might drive the 95 north end at Taylor's shaft, and one or two other ends which hold out the best promise could be selected for working. This need not be very expensive, and the capital you propose to raise should enable us to give the mine a good trial in depth.

OLGANOS GOLD.—Mr. Green, Dec. 31: Roger's level has been driven 8 fms. 1 ft. 6 in. in a large lode. This end will in another 10 fathoms drive come under the rich shoots of mineral driven through in the upper levels. This being a very important point. The lodes are obtained from the Chora level has given at the rate of 3% ozs. per ton. The surface work has been much interfered with by the Christmas holidays; but eight-ninths of the incline has been laid with oak rails and sleepers in a very substantial manner. This incline will be 900 ft. long.

CALCUTTA INTERNATIONAL EXHIBITION.

THE MACHINERY AND HARDWARE MART (CALCUTTA).

THE PROPRIETORS (one of whom is a Member of the Working Committee of the Exhibition) are prepared to RECEIVE CONSIGNMENTS of MACHINERY, HARDWARE, PAINTS, and all classes of Goods used by GOVERNMENT and MUNICIPAL ENGINEERS, MILLS, COLLIERIES, MINES, BREWERS, &c., &c. Full particulars on application to the London Agents,—

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NOTICE.

TO MINE OWNERS, MANAGERS, &c.

WANTED.—OLD, CONDEMNED, DISUSED HEMP or MANILLA, CAPSTAN, PIT, or OTHER ROPES, either round or flat. High price given.

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WANTED, a Gentleman who is willing to INVEST £2000 in LARGE SMELTING WORKS in SPAIN. He must have a thorough knowledge and practical experience of Mining. As this is a bona fide business personal inspection of the property is invited. Apply, by letter only, in first place, to DON CHENYMINGO CELESTINO, 89, Piccadilly.

WANTED, the MANAGEMENT of MINES, at home or abroad, latter preferred. Analyst, Assayer, and Surveyor. Has managed Gold and Phosphate Mines abroad. Address, "M.E., A.M.S., MINING JOURNAL Office, 26, Fleet-street.

PARTNER.—A PRECIOUS METAL SMELTING firm has an OPENING for a PARTNER with £5000 to £8000. Chemical knowledge preferred. Address, with particulars and references, to "No. 1," MINING JOURNAL Office, 26, Fleet-street, E.C.

PARTNER or PURCHASER WANTED for a HALF SHARE in a PATENT (Mechanical and connected with Mines) in full operation, of proved value; £2000 at least is required; large returns. Principals or their solicitors may apply, by letter, to "Beta," care of Fletcher, Fletcher, and Co., 51, Queen Victoria-street, E.C. Testimonials, &c.

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TO MINING ENGINEERS.

A GENTLEMAN (29), Associate Royal School of Mines, London, who has served Articles with Mining Engineers, desires APPOINTMENT as ASSISTANT. Three years' practical experience in Coal Mining, also conversant with Metal Mining. Would not object to go abroad to Report on Mines. Speaks French. Best references. No agents.

Address, "X," 25, Alexander-street, Westbourne Park, London, W.

A GENTLEMAN lately returned from the West Indies and South America, and used to the control of native labourers, is desirous of an APPOINTMENT as RESIDENT MANAGER on a PHOSPHATE MINE, or to REPORT on NEW CONCESSIONS. Has had ten years' experience with mineral phosphates, guano, and nitrate of soda, and would undertake the analysis of the same. Address, "Sombrero," Messrs. Deacon and Co.'s Advertising Offices, 154, Leadenhall-street, E.C.

A GENTLEMAN, with 20 years' experience as Financial Manager of large undertakings, is OPEN to RE-ENGAGEMENT either as CASHIER or FINANCIAL MANAGER. Can give the highest references and testimonials and security to any amount required. Address, "A. Z.," MINING JOURNAL Office, 26, Fleet-street, E.C.

TO CAPITALISTS AND INVESTORS.—To FORM A SYNDICATE to RAISE £16,000, and PURCHASE a VALUABLE and already made BUSINESS, which requires some additional capital, and from want of which good orders are obliged to be refused almost weekly. If formed into a Limited Liability Company some of the present proprietors would probably subscribe to some extent.

The business is in England, and the supply of the commodity practically inexhaustible. If carried on as a private partnership it might afford pleasant occupation to gentlemen of business habits. No special knowledge of the business necessary.

Address, "L. M. N." at Brown's Advertising Office, 4, Little George-street Westminster Abbey.

THE TOLIMA MINING COMPANY (LIMITED). The Directors have THIS DAY DECLARED a DIVIDEND on the "A" capital of the company of FIVE SHILLINGS per share, PAYABLE on the 15th instant.

By Order,

WM. W. HOLMES, Secretary.

35, Finsbury-circus, London, E.C., 2nd March, 1883.

MINE "EL CALLAO."

COUPONS OF SHARES 322

Gold in bars produced in the month of January, 1883, and remitted to Messrs. Baring Brothers and Co., London, 10,245.68 ozs.

DIVIDEND distributed for each coupon, \$300.

(Signed) A. LICCIOMI, President.

(Signed) VICTOR T. GRILLET, Treasurer.

THE NOUVEAU MONDE COMPANY.—A GENERAL MEETING of the shareholders of this company will be HELD at the offices of the company, 26, Rue Cambon, Paris, at Two o'clock in the afternoon of the 30th April next.

The "Gerant" will present to the shareholders the accounts of the company made up to the 31st December, 1882; will also state the arrangements he has made respecting the Macupai Mines; and will present to the shareholders a preliminary contract made for the acquisition of the Gold and Silver Mines of the Berkshire Company, in the United States; and to consult them respecting the necessary measures to be taken thereon.

March 2nd, 1883.

MR. JOHN LEAN, who for the sixth time has just returned from South America, Inspecting and Directing Gold Mines, OFFERS HIMSELF in a like capacity for any kind of METALLIC MINES at home or abroad.

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Have Agents in the various Mining Districts of Great Britain, the Continent, Australia, and the United States of America.

Inspections undertaken, either personally or by our Agents, and Reports of Advice as to Working given.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Jan. & Feb. 27—Brym-yr-Afr (slimes)				

FOR SALE, a 30 H.P. PORTABLE STEAM ENGINE has link-motion reversing gear, with winding and pumping gear complete. A 16 H.P. PORTABLE WINDING and PUMPING ENGINE: Also a 6 H.P. PORTABLE HOISTING ENGINE. To be seen at— BARROWS AND STEWART'S WORKS, BANBURY, OXON.

WATSON BROTHERS' MINING CIRCULAR

WATSON BROTHERS,
MINEOWNERS STOCK AND SHARE DEALERS &
1, ST MICHAEL'S ALLEY, CORNHILL, LONDON.

The unprecedented and almost continuous storms and floods during the past three or four months have not only left their mark on the land but on mines also, many of them having been put to extra expenses in draining, as well as for damages to machinery, &c. Costs, therefore, are heavier than usual, and in some cases returns have been delayed. And now we hear of a scarcity of coals in some districts, and it would become a serious thing to have some mines flooded again owing to their not getting a sufficient supply of this necessary commodity.

At Carnarvon Copper the launders to the water-wheel were blown down during a gale some time ago, and just at a time the ore was wanted at surface for the sampling it was under water, consequently no ore has been sold since November; 30 tons of rich ore, however, are now at Liverpool, and 20 more in course of preparation. The damage has been all repaired, and the agent writes this week of an improvement in the 80, and a good point to come off at Golden Venture. The delay in sampling, however, necessitated the payment in cash of several months' costs without any return, and the directors have thought it desirable to issue the 3000 reserved shares, which are to be allotted *pro rata* to present holders at 10s. per share, 12^{1/2} paid. Everything has been paid up in cash monthly, so that no liabilities whatever have been incurred, and the directors object to borrowing money. The ores are very rich, several parcels having brought close upon 10^{1/2} per ton, but the returns have not reached the quantities which the agent led the shareholders to expect at the meeting last July. Worked entirely by water-power the costs are very moderate, compared with other mines, and 20 tons of ore a month would pay them; this month the agent hopes to have 20 tons, and we have been led to expect 50 tons. The mine is said to have returned 100,000^l of ore, and only about 90 fathoms deep now. To work it properly, however, it was necessary to sink a new shaft from surface through particularly hard ground, and this has cost from 12,000^l to 15,000^l, all paid for, and there ought not to be any difficulty, looking at the prospects of the mine, to issue the unallotted shares.

The lode at New Caradon (No. 4), going towards Hallet's cross-course, has improved, and is producing more copper ore.

A telegram was received at the office of the company on Wednesday afternoon, stating that the bottom of the shaft at Langford had been reached, and when cleared of stuff we shall hear what the copper lode is like. And here it may be interesting to refer back, and look how matters stood when the present company took the mine in hand. The shaft, we were told, had been sunk on a fine copper lode, to intersect the Wells silver lode, which had yielded enormous riches in this and other mines in the district. When down to the 50, and so near the junction that one man, as the story goes, found some strings of silver at the deepest point, the engine was overpowered by water, and the mine flooded. Thus it remained for nearly 30 years, the idea being that no one could drain it owing to the extraordinary quantity of water; in fact, Capt. Goldsworthy was told plainly in the district he could not drain it, but he said he *would*, and has done so, by much ingenuity and by some of the largest pumps we should think ever put down in Cornwall, and by these the water is kept easily. The deepest point of the shaft was proved to be 10 fms. 3 ft. below the 40. At present the bottom is full of timber and rubbish, but in a few days we hope to have a report upon the lode, and the result is awaited with much interest. All those who knew the mine years ago are very sanguine as to the result, and the levels above the 40, as cleared and explored by Capt. Goldsworthy, show that large quantities of silver and other ores were obtained from them, and they lead him on to "great expectations."

We wish we could give a more encouraging reply to our correspondent, but there is just now an extraordinary absence of business, and a disinclination on the part of shareholders to come forward and support even good properties requiring a little more money. In Costhook mines calls can be made. In Limited companies there is always difficulty in persuading people to subscribe even at a discount; thus many properties are wound up and sacrificed just when they appear to be on the eve of success. As stated in the *Mining Journal* last week, one or two good discoveries are wanted to enliven the market, and we hope and believe Langford will soon show good, if not great results. Low-priced shares, generally, are being picked up, some at mere nominal prices. In the Caradon district there are West Caradon, New West Caradon, the New Caradon, and West Gomena—all with good points to come off, and they are all low in price just now. Of the foreign mines named we are not qualified to give an opinion.

At the adjourned meeting of Parys, held on Friday, the resolution authorising the issue of the unallotted shares (7667) was confirmed, and the necessary 3000 shares were subscribed for.

From Mr. JOHN B. REYNOLDS.—The Dolcoath question is still the question of the hour; interest in it, however, lessens, and will lessen. So far from other lords following the example so unfortunately set by Mr. Bassett, it is now certain that they will adopt a directly opposite policy. It is expected that in order to avoid legislation, which would be unquestionably detrimental to their interests, they will volunteer concessions, and do all they can to encourage capitalists to develop their mines. It is high time in their own interest they did so, but if the Cornish people delay concerted action to influence Parliament to pass a needful measure it will be a great mistake. We rejoice at the result of the Dolcoath meeting. We know of the urgent reasons why the existing lease should be cancelled, but these reasons are solely in the interests of the lord of the manor. The company has the best of it, and are likely to have, if they continue to refuse to surrender their present deed, which has 4½ more years to run. It was well said that "much may happen in 4½ years affecting Dolcoath," and much will happen if Mr. Bassett does not alter his policy. It is to be regretted that he is so badly advised, the more so as his family will so seriously suffer by this mistake. As we before intimated, the matter for congratulation is that no other lord of consequence is likely to follow the unfortunate example of the Tehidy authorities, and this cannot be too soon or positively made public. The conduct of Capt. Thomas, the manager of Dolcoath, is as usual beyond all praise, and it is fortunate that he has such a judicious and splendid committee to support him.

Important mine meetings are being announced, and long notices are being given—one week before the time West Kitty shareholders are to be called together. The amount of dividend is not yet known. The shares have been depressed, but a very fair business has been transacted in them. The market value of these shares will probably be regulated by the price of tin. Trevaunance shareholders meet on the following day, and their accounts will show well, and the report is certain to be good. The sum of 20,000^l appears to be a very low figure for a property of this nature. But not long since West Kitty, the adjoining mine, was not selling for a larger sum, and it has since been eagerly sought after at the rate of 30,000^l. Very little, however, has been said about Trevaunance, and it appears to us that very little is said, as a rule, about shares which are really worth attention. This reminds us of New Kitty. It would appear that this mine should be narrowly watched. Not very long ago the shares were being eagerly purchased in Cornwall at 3½, and the demand was very much beyond the supply. Enquiries should be made as to its position and prospects. New Kitty has the advantage of leases from the Duke of Buckingham and Mr. Enys, than whom it would be impossible to have better lords, and the leases have, we believe, nearly 17 years to run. The mine adjoins West Kitty, and is on the West Kitty lode beyond doubt. These are significant facts which should not be lost sight of. It will be observed that, on the whole, the mining market has not been in a very unsatisfactory state. No doubt there has been an absence of business, but this has not been the peculiarity of the mine market alone. All markets have been more or less depressed. To the initiated this has not been a matter for surprise, but it has been most undoubtedly a very fortunate circumstance for moneyed men. Large purchases of stocks have been quietly made, and large profits will be the result. "Weak men are going to the wall" no doubt, but strong men are increasing in strength. Let us hope that the strength of the prosperous will not diminish, and that the weak and unfortunate may have a happy turn of fortune.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the TIN HILL (LIMITED).
ALL CREDITORS or CLAIMANTS of the ABOVE-NAMED COMPANY, who have not received notice from the Official Liquidator of the company that their claims have been already admitted, are hereby required TO COME IN and PROVE their several DEBTS or CLAIMS at the Registrar's Office, Truro, on or before the 14th day of March, 1883; or, in default thereof, they will be EXCLUDED from the BENEFIT of any DISTRIBUTION made before such proof.

FREDERICK MARSHALL, Registrar.

Dated Registrar's Office, Truro, the 23rd day of February, 1883.

NOTICE TO COAL CONTRACTORS.

THE COMMISSIONERS OF IRISH LIGHTS are prepared to RECEIVE TENDERS for the following SUPPLIES of GAS and FURNACE COALS.

The Cannel to be supplied from the Ledmaghan or Arniston Pits, and the Furnace to be either Whitehaven Slack, House Coal Dross, or Coking Coal Breeze.

Gas Coal—Tons. Furnace Coal—Tons

St. John's Point Co. Down 18 42
Rockabill Co. Dublin 30 24
Howth Bally Ditto 30 50
Wicklow Head Co. Wicklow 26 40
Hook Tower Co. Wexford 30 27
Minehead Co. Waterford 25 27
Galley Head Co. Cork 45 35

Specifications and Tender Forms, on which offers must be made, can be had on application to the undersigned.

Tenders to be delivered at the Irish Lights Office up to noon, on Thursday, the 1st March, sealed and endorsed, "Tender for Gas and Furnace Coal."

The Commissioners do not bind themselves to accept the lowest or any Tender.

By order, OWEN ARMSTRONG, Secretary.

Irish Lights Office, 20th February, 1883.

THE EAST PANT DU LEAD MINING COMPANY (LIMITED).

THE VALUABLE LEASEHOLD PREMISES, known as the EAST PANT DU MINE, situate in the parish of Nerguis, in the county of Flint, are OFFERED FOR SALE.

For particulars, apply to JOHN ASHWORTH, 8, King-street, Manchester.

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TO BE DISPOSED OF IMMEDIATELY, SEVERAL GOOD MINES, new and old.

For particulars, apply to H. CHR. HANSEN, Smorsalminding, Bergen, Norway.

FOR SALE, on account of the death of the Proprietor, the RHOS ANTHRACITE COLLIERY, Llanelli, South Wales, connected with the railway system of the country, and with the ports of Swansea and Llanelli. This colliery, with the present low price of coal, is worked at a fair profit.

Also the GORSGOCH COLLIERY and BRICKWORKS.

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ENGINEERS, BOILERS, &c., FOR SALE:—FIRST-CLASS 50-inch cylinder PUMPING ENGINE ditto 24-inch ROTARY ENGINE CALCINER, &c.

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25 ditto ditto (without) ditto
16 ditto ditto (with or without) ditto
12 ditto ditto ditto ditto
10, 6, 7, and 5 H.P. single cylinder PORTABLE or SEMI-PORTABLE ENGINES.

5, 6, 4, and 3 ditto VERTICAL STEAM ENGINES.

A 6 H.P. combined ENGINE, BOILER, and 6 ft. pan Mortar Mill on wheels.

Also several excellent secondhand PORTABLE STEAM ENGINES.

12 H.P. double cylinder PORTABLE ENGINE, by Burrell and Son.

8 single cylinder ditto Marshall and Son.

8 ditto ditto Barrows and Stewart.

6 ditto ditto Hornsby and Son.

A Cornish BOILER, 8 ft. 10 long x 4 ft. 6 diameter.

A ditto 9 ft. 10 long x 3 ft. 2 "

A CIRCULAR SAW TABLE, 5 ft. x 2 ft. 6, with 30 in. saw.

A BAND SAW MACHINE, 30 in. pulleys.

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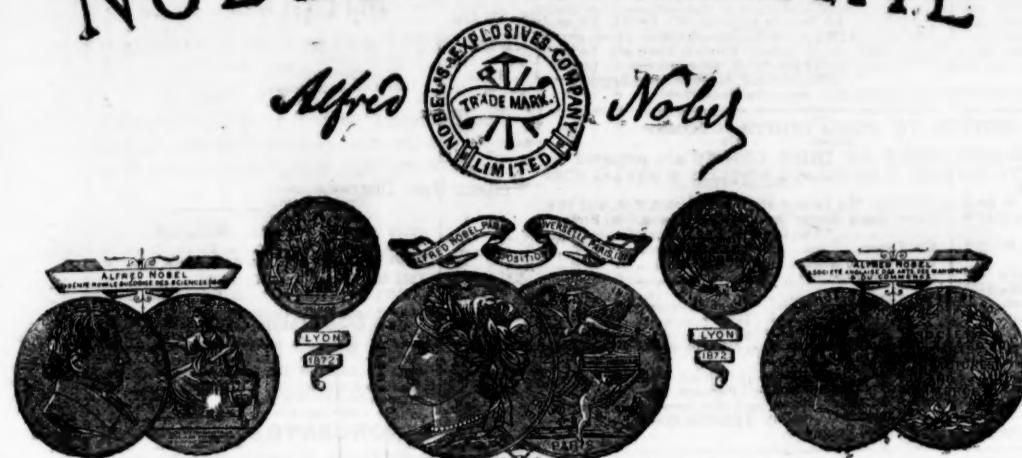
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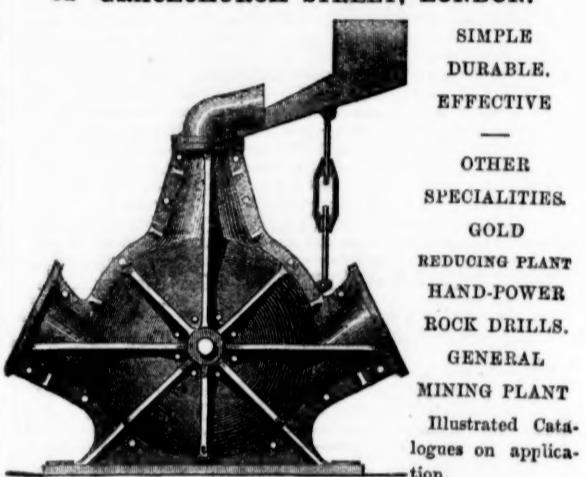
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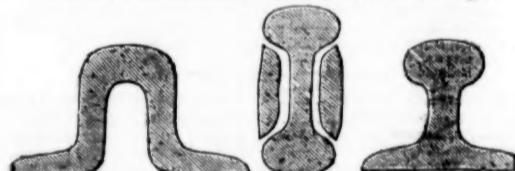
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